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STATE DOCUMENTS

AUG 21 1974

MONTANA WATER POLLUTION CONTROL PROGRAM PLAN

PREPARED FOR
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
DENVER, COLORADO

PREPARED BY
WATER QUALITY BUREAU
ENVIRONMENTAL SCIENCES DIVISION
DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

June 15, 1974

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INTRODUCTION

The state's goals with regard to water quality are set forth in Section 69-4801, R.C.M. 1947 of the state's water pollution control act, which states in part:

- (1) *It is the public policy of this state to:*
 - (a) *conserve water by protecting, maintaining, and improving the quality and potability of water for public water supplies, wildlife, fish and aquatic life, agriculture, industry, recreation, and other beneficial uses;*
 - (b) *provide a comprehensive program for the prevention, abatement, and control of water pollution.*

MONTANA'S WATER QUALITY PROBLEMS

The water quality limited and effluent limited segments for which water quality standards are not presently being met are shown on Table 1 and 2, respectively. Water quality limited segments are those stream segments for which application of greater than secondary treatment for municipalities and greater than best practicable treatment for industries will probably be needed to meet water quality standards. Effluent limited stream segments are the stream segments for which the application of secondary treatment and best practicable treatment will probably be adequate to meet water quality standards. The stream segments not shown on the segment classifications are considered to be effluent limited for which water quality standards are presently being met. The stream segments are further shown in Appendix A with a listing of major and minor dischargers on each segment.

The water quality segments, which are mainly due to non-point sources and acid mine drainages, will be the most difficult to solve. The Clarks Fork of the Yellowstone River, Milk River, and Muddy Creek (tributary of Sun River) are of particular concern from the non-point source standpoint as there are long periods of high turbidity. The Marias River is an example of high salinity due in part to irrigation. Sand Coulee Creek, the Dry Fork of Belt Creek, Upper Stillwater drainage, and Upper Blackfoot River drainage are examples of poor overall stream water quality due to acid mine drainage.

Industrial waste dischargers for the most part will need minor improvements to meet best practicable treatment requirements established by the act, and no great problem in meeting these requirements is foreseen. Silver Bow Creek below the Anaconda Company discharge at Butte needs further and continuous review to determine if the existing classification (E, F) can be upgraded. Present waste discharges combined with non-point source pollution from past mining activities may make upgrading very difficult.

The status of municipal and industrial dischargers is shown in Appendix A. A listing of communities with needs for sewers and treatment along with construction grants priorities is shown as Appendix B. The priorities were determined by using the formulas shown on Appendix C. One of the state's major problems at this time is obtaining adequate federal funding for these projects so they can be constructed in a reasonable period of time. The Federal Water Pollution Control Act Amendments of 1972 require the meeting of secondary treatment by July 1, 1977. In addition, there are many municipalities needing immediate sewer improvements to correct existing problems within their systems. Some of the state's smaller communities are also in need of sewers and treatment systems to replace inadequate individual sewage disposal facilities.

Dewatering of streams for irrigation creates numerous problems in the state, especially where there are substantial municipal discharges. It makes little sense to provide a very high degree of treatment only to have the sewage discharged to a stream with little or no flow. The state has classified some of the streams E, F for this reason.

Supersaturation of dissolved gases, particularly nitrogen, has greatly reduced fish in the Kootenai River below Libby Dam. The gases are entrapped in the water as it overflows the dam.

One of the state's problems which occurs relatively infrequently is oils reaching surface water systems due to heavy rains in oil-producing areas, which wash out holding ponds. A related problem occurs infrequently due to spillage of oils from oilfield storage facilities and pipeline breaks.

Of considerable immediate concern is the coalfield developments in eastern Montana. The pollution control concern here is mainly with the potential for groundwater pollution. There is the potential also for sediment pollution due to erosion.

As discharge requirements to surface waters become higher, a greater danger to underground waters exists. Land disposal, which has been much discussed during recent years, is not without problems. A close watch must be kept to insure that we do not transfer our surface water problems to our underground waters. Similarly, we must not allow our surface water problems to be transferred to air pollution problems.

Great Western Sugar Company at Billings is an example of what can occur. In an effort to prevent discharge of flume wastewaters to surface water streams, a treatment and recycle system was installed during 1972. This treatment and recycle system, while solving the surface water discharge problem, created groundwater and air pollution problems. The plant and treatment system are surrounded by a residential area.

Montana's greatest potential for groundwater damage is in saline seep, which also has substantial potential for causing surface water pollution. The House - Senate Joint Resolution (Appendix F) adopted at the 1973 session of the legislature explains the problem which exists and future damage which could occur.

The state's clearwater lakes and streams should be closely watched to prevent degradation from man-caused pollution. This is the state's greatest challenge. Flathead Lake is of particular immediate concern.

Additional water quality problems should be identified as the remaining water quality management plans are completed during the fiscal year.

A discussion of various program elements, which are important in the overall water quality management strategy, follows.

TABLE 1. WATER QUALITY LIMITED STREAM SEGMENTS

BASIN	STREAM SEGMENT	GRID COORDINATES						COMMENTS
		Beginning			End			
		T	R	Sec.	T	R	Sec.	
Upper Missouri (01) ¹	Grasshopper Creek (02) ²	8S	11W	6	8S	10W	25	High in metals and turbidity due to past mine-mill activities.
	Gallatin River drainage (03)	Entire drainage						Possible dissolved oxygen problem below city of Bozeman and possible nutrient problem.
	Madison River (04)	13S	4E	15	2N	2E	17	High in arsenic and fluoride due to drainage from Yellowstone Park.

Upper Yellowstone (02)	Upper Stillwater River drainage to Beehive (02)	9S	14E	16	5S	15E	32	High in metals and acidity due to past mine activities.
	Gardiner River	10S	8E	13	9S	8E	23	High in arsenic due to natural hot springs in Yellowstone Park.
	Clarks Fork Yellowstone and Yellowstone River from confluence to Laurel (04)	6S	23E	15	2S	24E	24	High in turbidity, sediment, and coliforms. Problem is due to fragility of soil in Clarks Fork drainage, poor land conservation practices, feedlots, and city of Billings.

Missouri-Sun-Smith (03)	Belt Creek below and including Dry Fork of Belt Creek (02)	16N	7W	33	21N	5E	2	High in acidity and metals due to past mine-mill operations.
	Sand Coulee Creek (03)	16N	5E	34	20N	3E	36	High in metals and acidity due to past coal mining operations.
	Missouri River from Canyon Ferry Reservoir to Holter Dam (04)	7N	2E	30	14N	3W	8	Eutrophication problem which is probably due to non-point and point sources.

BASIN	STREAM SEGMENT	G.P. COORDINATES						COMMENTS
		Beginning			End			
		T	R	Sec.	T	R	Sec.	
Missouri-Sun-Smith (Continued)	Muddy Creek, Sun River and Missouri River (05)	23N	1W	3	20N	3E	11	High in turbidity and sediment due principally to poor irrigation practices. High coliforms present at this time due to city of Great Falls.
Upper Clark Fork (04)	Blackfoot River drainage (02)	15N	6W	22	13N	18W	21	High in metals and acidity due to past mine-mill operations.
	Silver Bow Creek and Upper Clark Fork to Blackfoot River (03)	3N	8W	23	13N	18W	21	High in metals and sulfates due to present and past mining activities to Little Blackfoot River. Dissolved oxygen problem during warm weather and low flow from Cottonwood Creek to Blackfoot River.
Flathead (05)	Flathead River drainage above Kerr Dam (02)	Entire drainage above Kerr Dam						Possible eutrophication problem due to municipal and non-point discharges.
Marias (06)	Teton River (02)	22N	3W	29	25N	10E	8	High in salinity due to land drainage.
Milk (07)	Milk River (02)	32N	16E	4	33N	19E	33	High in turbidity and sediment due principally to poor land conservation practices and type of soils present in area. High in coliforms due to municipal discharges, feedlots, and irri- gation practices. Possible dis- solved oxygen problem.
Lower Clark Fork (09)	Clark Fork from Black- foot River to Flathead River (02)	13N	18W	21	19N	25W	34	Dissolved oxygen problem during warm weather and low flow from Blackfoot River to Superior, Montana. Color problem below Hoerner- Waldorf discharges.

GRID COORDINATES

<u>BASIN</u>	<u>STREAM SEGMENT</u>	<u>Beginning</u>			<u>End</u>			<u>COMMENTS</u>
		<u>T</u>	<u>R</u>	<u>Sec.</u>	<u>T</u>	<u>R</u>	<u>Sec.</u>	
Kootenai (10)	Kootenai River down- stream from Libby Dam (02)	30N	29W	5	33N	34W	19	Supersaturation of dissolved gases due to Libby Dam

1. Basin Code
2. Segment Code

TABLE 2. EFFLUENT LIMITED STREAM SEGMENTS WHICH PRESENTLY
DO NOT MEET WATER QUALITY STANDARDS

BASIN	STREAM SEGMENT	GRID COORDINATES						COMMENTS
		Beginning			End			
		T	R	Sec.	T	R	Sec.	
Upper Missouri (01) ¹	Beaverhead River (01) ²	7S	8W	18	6S	8W	27	Coliforms due to city of Dillon discharge.
	Boulder River (01)	6N	4W	33	5N	3W	19	Coliforms due to town of Boulder and state discharge.
	Jefferson River (01)	2N	E	24	2N	2E	16	Coliforms due to city of Three Forks discharge.
Upper Yellowstone River (02)	Silver Tip Creek	9S	23E	34	7S	22E	35	Oils from oil production facilities (believed corrected)
Missouri-Sun-Smith (03)	Missouri River	7N	1E	25	7N	2E	20	Coliforms due to city of Townsend discharge.
	Prickly Pear Creek (01)	10N	3W	25	11N	3W	26	Coliforms and low dissolved oxygen due to city of Helena discharge.
Flathead River (05)	Spring Creek (01)	20N	20W	2	20N	20W	15	Low dissolved oxygen due to Consolidated Dairies discharge (corrected to major extent during past year).
	Mission Creek (01)	18N	20W	14	19N	20W	33	Coliforms due to town of St. Ignatius discharge.
	Hot Springs Creek (01)	21N	24W	3	22N	23W	31	Coliforms due to town of Hot Springs discharge.
Marias River (06)	Two Medicine Creek (01)	31N	12W	20	31N	11W	32	Coliforms due to discharges from community of East Glacier.

BASIN	STREAM SEGMENT	GRID COORDINATES						COMMENTS
		Beginning			End			
		T	R	Sec.	T	R	Sec.	
Lower Clark Fork (09)	Bitterroot River (01)	6N	21W	24	12N	20W	1	Coliforms from city of Hamilton and town of Darby discharges.
Kootenai River (10)	Tobacco River (01)	36N	27W	14	36N	27W	7	Coliforms due to city of Eureka discharge.

-
1. Basin Code
 2. Segment Code

WATER QUALITY STANDARDS

1. State Legislation

Section 69-4808.2 (1) (a) (b) (c) (2) (3) (4) states:

(1) *The board shall:*

- (a) *establish and modify the classification of all waters in accordance with their present and future most beneficial uses;*
- (b) *formulate standards of water purity and classification of water according to its most beneficial uses, giving consideration to the economics of waste treatment and prevention;*
- (c) *review from time to time, at intervals of not more than three years, established classifications of water and standards of water purity and classification, provided that*
 - (2) *in revising classifications or standards or in adopting new classifications or standards the board may not so formulate standards of water purity or classify any state water as to lower any level applicable under the classifications and standards adopted by the state water pollution control council under section 133, chapter 197 of the Laws of 1967 (69-4813).*
 - (3) *the board shall require that any state waters whose existing quality is better than the established standards as of the date on which such standards become effective be maintained at that high quality unless it has been affirmatively demonstrated to the board that a change is justifiable as a result of necessary economic or social development and will not preclude present and anticipated use of such waters, and,*
 - (4) *the board shall require any industrial, public, or private project or development, which would constitute a new source of pollution or an increase source of pollution to high quality waters, referred to in (3) immediately above, to provide the degree of waste treatment necessary to maintain that existing high water quality;*

2. Review of Past Program

Water quality standards establish minimum conditions and treatment to be met in order to protect, maintain, and improve the quality and

potability of a water for public water supplies, wildlife, fish and aquatic life, agriculture, industry, recreation, and other beneficial uses. The standards establish the legal basis for enactment of violations of stream conditions. Following enactment of Montana's first water pollution control act in 1955, water quality criteria, stream-use classifications, and minimum treatment requirements were established for essentially all streams in the state. After enactment of the Federal Water Quality Act in 1965, these standards were reviewed, presented at public hearing, and revised during 1967. An anti-degradation clause was provided in the state law by the 1971 legislature.

The Federal Water Pollution Control Act Amendments of 1972 require review of existing state water quality standards by the Environmental Protection Agency. Following this review, EPA notified the state on January 18, 1973 of required changes to meet the intent of the federal amendments. The state's first step was to review the existing water quality standards and EPA's recommended changes. The recommended changes were reviewed by the State Water Pollution Control Advisory Council on February 5, 1973, and following this meeting, the staff of the Water Quality Bureau developed proposed changes. These were reviewed with the council and the Board of Health and Environmental Sciences at a joint meeting held on March 24, 1973. A public hearing was held for the revised water quality standards on May 26, 1973, and the revised standards were adopted by the board on July 13, 1973. Following publication by the Secretary of State, the new standards became an official document on November 4, 1973.

3. Strategy

The 1973 water quality standards should be revised during the year. The specific water quality criteria for B-D₁, B-D₂, and B-D₃ waters contain the following statement (underlined):

Concentrations of toxic or other deleterious substances, pesticides and organic and inorganic materials including heavy metals, after treatment for domestic use, are not to exceed the recommended limits contained in the 1962 U. S. Public Health Service Drinking Water Standards or subsequent editions; no increase of more than 10 percent of the concentration present in the receiving waters is permitted; maximum allowable concentrations are to be less than acute or chronic problem levels as revealed by bioassay or other methods.

This statement was inadvertently carried from the A-open-D₁ classification to the B-D₁ and other B classifications and makes many of the state's municipalities and industries in violation of the water quality standards. It would cause major financial outputs to correct by treatment with no real benefit to water quality in most instances. The A-open-D₁ classification is given to streams which are used in most cases for public water supplies with minimal water treatment.

Section 69-4808.2(1) (c) (2) shown on the preceding page should be considered for change as there are natural conditions which make some of the standards adopted in 1967 impossible to meet.

MUNICIPAL FACILITIES CONSTRUCTION, OPERATION AND MAINTENANCE

1. Review of Past Program

A minimum requirement of primary treatment for all domestic sewage was first adopted by the Board of Health in 1952. Smaller municipalities, for the most part, constructed sewage lagoons which easily met the requirements of primary treatment; and in many cases, met the requirements of secondary treatment (the minimum treatment established in 1967). Definite effluent limitations were established by EPA regulations during fiscal year 1973.

Some of the municipalities with lagoons presently need improvements to meet these limitations. The larger cities, for the most part, have constructed mechanical treatment facilities. Some of these have been upgraded to secondary, and the remainder are in the process of constructing or planning secondary treatment.

Since 1956, there has been a federal grant program to assist municipalities in the construction of sewage treatment facilities, which included outfall and interceptor sewers. In 1971, the state legislature appropriated \$4,000,000 to aid the municipalities in construction of these same facilities. The 1973 legislature appropriated \$1,600,000 to reimburse municipalities that had proceeded with construction since July 1, 1966 without waiting for state grants. Because of changes in funding percentage by the federal government, state grants for new projects have been discontinued. Since passage of the federal amendments of 1972, the federal grant program provides 75 percent of the eligible project costs. Separation of storm and sanitary sewers, sewers to serve existing areas, and reduction of infiltration water are now also included as eligible items. Because of the shortage of federal grant funds, a priority system for fund allocation must be used. The state, under EPA guidance, establishes priorities for proposed projects. The state's allocation of federal grant funds is based on the ratio of the state's needs to nationwide needs.

An integral part of municipal sewage treatment is adequate operation and maintenance of the facilities after construction is completed. In an effort to improve operation and maintenance, the bureau, in cooperation with Montana State University at Bozeman, has conducted a school each year. During recent years, this school has been extended from two and one-half days to five days. About 100 operators attend each year.

In addition, classroom instruction was provided to operators in selected areas and on-the-job training was provided in conjunction with the program. Assistance also was provided to operators when requests were received.

An operator certification program was established in 1968 following enactment of a law requiring certification of those in responsible charge of a

public water distribution system, water supply system, sewage treatment or industrial waste treatment system. Those in charge on July 1, 1967 could receive certification without a written examination. The new operators must be certified by examination.

2. Strategy

(a) Construction Grants

The Montana priority system for EPA construction grants is attached as Appendix C. This system has been applied to all projects which have known needed improvements to their sewerage systems and treatment facilities. The ranking of the projects is shown in Appendix B. As additional monitoring of effluents is performed during the plan year, it can be expected that other municipalities will be added to the listing. A new needs list should be completed by July 26, 1974. Those projects scheduled to receive certification by the department for the fiscal year 1975 grant allocation funds, along with steps to be funded are shown in Table 3. In accordance with EPA Title II regulations, which provide for grants in three steps, it is anticipated that funding for one or more steps for the 39 projects shown in Table 3 will be available from the state's fiscal year 1975 allocation of \$7,534,000. Of this total amount, it is expected that the 36 step 1 (facility planning) will require \$57,250; that there will be 36 step 2 (construction plans and specifications) projects for a cost of \$513,750; and 15 step 3 (construction) projects for a cost of \$5,802,250. The remainder will be kept in reserve for cost overruns.

The bureau personnel, in cooperation with EPA personnel, have already met with many of the 39 project agencies and engineers in pre-application conferences. It is planned to conduct pre-application conferences with the remainder. Because the facility planning requirements are new, interim reviews of the facility plans will be recommended to the project engineers. By doing this, it is expected that a minimum review time will be needed when the facility plan is completed.

In December of 1973, the state signed an agreement with EPA to take over major review of facility plans, plans and specifications, and operation and maintenance manuals for construction grant projects. An additional public health engineer was hired to assist in this program. A similar agreement has been signed for FY 1975 (Appendix E). By eliminating duplication of effort, the time for grant processing can be eliminated. In fiscal year 1975, the bureau is planning on assisting 36 communities in initiating programs for facility upgrading, reviewing 36 facility plans, 20 final plans and specifications, and 12 operation and maintenance manuals. If manpower is available, the bureau will assist EPA in construction

FY 75 CONSTRUCTION GRANTS PROJECT LIST

State MontanaState Code 3 0 (numeric)

(List in Priority Rank Order)

APPLICANT NAME	SEGMENT CODE(1)	GRANT IDENTIF. NUMBER				TYPE OF PROJECT (STEP) (2)	FACILITY NEED (3)	FACILITY NEED DESCRIPTION/SCOPE (Extended descriptions may be continued on additional pages)	EST. START DATE	EST. COMP. DATE	ESTIMATED TOTAL COST OF PROJECT (\$)	ESTIMATED EPA ASSIS- TANCE RE- QUIRED TO COMPLETE PROJECT (\$)	SIX MONTH PERIOD (JULY-DEC. OR JAN.- JUNE) WHEN GRANT WILL BE REQUIRED
		FACILITY NEED	SEQUENCE										
Three Forks	0104	0	1	9	5			Railroad Ave. Interceptor			FY74 funds	FY74 funds	
Whitefish (Bh. Pt)	0502	0	1	9	6			Birch Point Interceptor			FY74 funds	FY74 funds	
Missoula	0902	0	1	9	9	0	1	(3) Phase II con.-secondary plt.	10-74	10-75	1,300,000	975,000	July-Dec.
Three Forks	0104	0	2	0	0	0	1	(1)(2) Provide secondary treatment	4-74	7-75	25,000	18,750	" "
Flaxville	1401	0	1	9	4			Sewerage system			FY74 funds	FY74 funds	
Great Falls	0305	0	2	0	1	0	1	(3) Contract IV-Complete treat- ment works construction	10-74	7-76	4,185,000	3,138,750	" "
Victor	0401	0	2	0	2	0	1	(1)(2)(3) Collection treatment	5-74	7-75	425,000	318,750	" "
Miles City	1101	0	2	0	3	0	1	(1)(2)(3) Upgrade existing treatment	6-74	6-75	450,000	337,500	" "
Poplar	1401	0	2	0	4	0	1	(1)(2)(3) Upgrade existing treatment	6-74	10-75	400,000	300,000	" "
Billings 6th Ave.N. Interceptor	0201	0	2	0	5	0	1	(1)(2)(3) Interceptor	6-74	10-75	240,000	180,000	" "

(1) Segment Code should be consistent with Segment List.

(2) Each step or combination of steps constitutes a separate project.

FY 75 CONSTRUCTION GRANTS PROJECT LIST

State Montana

State Code 3 0 (numeric)

(List in Priority Rank Order)

APPLICANT NAME	SEGMENT CODE(1)	GRANT IDENTIF. NUMBER					TYPE OF PROJECT		FACILITY NEED DESCRIPTION/SCOPE (Extended descriptions may be continued on additional pages)	EST. START DATE	EST. COMP. DATE	ESTIMATED TOTAL COST OF PROJECT	ESTIMATED EPA ASSIS- TANCE RE- QUIRED TO COMPLETE PROJECT	SIX MONTH PERIOD (JULY-DEC. OR JAN.- JUNE) WHEN GRANT WILL BE REQUIRED
		FACILITY NEED				SEQUENCE	(STEP) (2)							
Glasgow	0702	0	1	9	8				Upgrade existing lagoon sys.			FY74 funds	FY74 funds	
Whitefish	0502	0	2	0	6	0	1	(1)	Upgrade existing treatment	5-74	6-75	50,000	37,500	July-Dec.
Gall. Co. RID 305	0103	0	2	0	7	0	1	(3)	Complete treatment work	10-74	2-76	150,000	112,500	" "
Bozeman	0103	0	2	0	8	0	1	(1)(2)(3)	Upgrade existing treatment	7-74	12-76	250,000	187,500	" "
Bigfork	0502	0	2	0	9	0	1	(1)(2)	Upgrade existing treatment and rehabilitation	6-74	12-75	15,000	11,250	" "
Livingston	0201	0	2	1	0	0	1	(1)(2)(3)	Upgrade existing treatment	6-74	12-75	300,000	225,000	" "
Dillon	0101	0	2	1	1	0	1	(1)(2)(3)	Upgrade existing treatment	7-74	10-75	200,000	150,000	" "
Libby	1002	0	2	1	2	0	1	(1)(2)	Upgrade existing treatment	6-74	10-75	50,000	37,500	" "
Hamilton	0401	0	2	1	3	0	1	(1)(2)	Reduce inf. and imp. treat.	7-74	7-75	40,000	30,000	" "
Fed Lodge	0201	0	2	1	4	0	1	(1)(2)	Upgrade existing treatment	6-74	6-75	15,000	11,250	" "

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 (2) Each step or combination of steps constitutes a separate project.

State MontanaState Code 3 0 (numeric)

(List in Priority Rank Order)

APPLICANT NAME	SEGMENT CODE(1)	GRANT IDENTIF. NUMBER					TYPE OF PROJECT	FACILITY NEED DESCRIPTION/SCOPE (Extended descriptions may be continued on additional pages)	EST. START DATE	EST. COMP. DATE	ESTIMATED TOTAL COST OF PROJECT	ESTIMATED EPA ASSIS- TANCE RE- QUIRED TO COMPLETE PROJECT	SIX MONTH PERIOD (JULY-DEC. OR JAN.- JUNE) WHEN GRANT WILL BE REQUIRED	
		FACILITY NEED			SEQUENCE	(STEP) (2)								
Townsend	0301	0	2	1			5	0	1	(1)(2)(3)	Upgrade existing treatment	4-74	10-75	100,000
Thompson Falls	0901	0	2	1	6	0	1	(1)(2)(3)	Upgrade existing treatment	5-74	10-75	30,000	22,500	" "
Boulder	0101	0	2	1	7	0	1	(1)	Upgrade existing treatment	5-74	6-75	10,000	7,500	" "
Eureka	1001	0	2	1	8	0	1	(1)(2)	Upgrade existing treatment	4-74	6-75	30,000	22,500	" "
Columbus	0201	0	2	1	9	0	1	(1)(2)	Upgrade existing treatment	6-74	6-75	15,000	11,250	" "
Whitehall	0101	0	2	2	0	0	1	(1)(2)(3)	Upgrade existing treatment	6-74	10-75	60,000	45,000	" "
Butte	0403	0	2	2	1	0	1	(1)(2)	Upgrade existing treatment	5-74	6-75	436,000	327,000	" "
Stevensville	0401	0	2	2	2	0	1	(1)(2)	Upgrade existing treatment	5-74	2-75	50,000	37,500	" "
Manhattan	0103	0	2	2	3	0	1	(1)(2)(3)	Upgrade existing treatment	5-74	10-75	25,000	18,750	" "
Lodge Grass	0801	0	2	2	4	0	1	(1)(2)(3)	Upgrade existing treatment	6-74	6-75	60,000	45,000	" "
Sheridan	0101	0	2	2	5	0	1	(1)(2)	Upgrade existing treatment	5-74	6-75	18,000	13,500	" "

(1) Segment Code should be consistent with Segment List.

(2) Each step or combination of steps constitutes a separate project.

FY 75 CONSTRUCTION GRANTS PROJECT LIST

State Montana

State Code 3 0 (numeric)

(List in Priority Rank Order)

APPLICANT NAME	SEGMENT CODE(1)	GRANT IDENTIF. NUMBER					TYPE OF PROJECT (STEP) (2)	FACILITY NEED DESCRIPTION/SCOPE (Extended descriptions may be continued on additional pages)	EST. START DATE	EST. COMP. DATE	ESTIMATED TOTAL COST OF PROJECT	ESTIMATED EPA ASSIS- TANCE RE- QUIRED TO COMPLETE PROJECT	SIX MONTH PERIOD (JULY-DEC. OR JAN.- JUNE) WHEN GRANT WILL BE REQUIRED	
		FACILITY NEED			SEQUENCE									
Sunburst	0701	0	2	2	6	0	1	(1)(2)	Upgrade existing treatment	7-74	7-75	13,000	9,750	July-Dec.
Absarokee	0201	0	2	2	7	0	1	(1)(2)	Upgrade existing treatment	7-74	7-75	18,000	13,500	" "
Darby	0401	0	2	2	8	0	1	(1)(2)	Upgrade existing treatment	7-74	7-75	10,000	7,500	" "
Ennis	0104	0	2	2	9	0	1	(1)(2)	Upgrade existing treatment	6-74	4-75	12,000	9,000	" "
East Glacier	0601	0	2	3	0	0	1	(1)(2)	Upgrade existing treatment	7-74	7-75	18,000	13,500	" "
Roberts	0201	0	2	3	1	0	1	(1)(2)	Upgrade existing treatment	7-74	7-75	10,000	7,500	" "
Hobson	1301	0	2	3	2	0	1	(1)(2)	Upgrade existing treatment	7-74	7-75	10,000	7,500	" "
Bearcreek	0201	0	2	3	3	0	1	(1)(2)	Upgrade existing treatment	7-74	7-75	10,000	7,500	" "
Lewistown	1301	0	2	3	4	0	1	(1)(2)	Upgrade existing treatment	7-74	10-75	50,000	37,500	" "
Laurel	0201	0	2	3	5	0	1	(1)(2)	Upgrade existing treatment	6-74	10-75	50,000	37,500	" "

- (1) Segment Code should be consistent with Segment List.
 (2) Each step or combination of steps constitutes a separate project.

FY 75 CONSTRUCTION GROUPS PROJECT LIST

State Montana

State Code 3 0 (numeric)

(List in Priority Rank Order)

[illegible]

- (1) Segment Code should be consistent with Segment List.
- (2) Each step or combination of steps constitutes a separate project.

inspections of grant projects, and when possible, will accompany EPA on final inspections. There should be 12 final inspections in fiscal year 1975.

During the summer of 1974, three major secondary treatment projects are expected to reach completion and begin start-up. These are Havre, Helena and Kalispell. Another major secondary treatment project (Billings) should be nearing completion at the end of the plan year. The Great Falls and Missoula projects should receive grant funds for their last contracts to complete their new treatment facilities. The other major municipal dischargers (Bozeman and Butte) should receive planning funds for upgrading their secondary treatment facilities; however, construction is not expected to begin until fiscal year 1976.

The facility plan boundaries will be submitted with each application for step 1 grant.

(b) Municipality Facility Operation and Maintenance Inspections and Special Assistance

It is planned to provide at least one operation and maintenance inspection each year of each treatment facility. Critical installations will be provided additional inspections where possible.

There are 150 public sewer systems; however, not all have discharges, but all will be inspected. An estimated 15 follow-up inspections will be made where improved operation and maintenance is needed. This will be about the same number of inspections made as during fiscal year 1974. Other than monitoring reports required under the NPDES and MPDES programs, no other routine reporting is required of these public discharges or facility operations. It is estimated that EPA will conduct inspections of federal installations and Indian reservation treatment facilities.

EPA Form 7500-5 will be utilized for operation and maintenance inspections. Facilities needing special assistance on operation and maintenance will be handled on a request basis. Assistance of EPA operation and maintenance personnel will be requested where long-term (two or three weeks) assistance will be required. Butte, Helena, Kalispell and Havre are places where EPA assistance may be requested.

(c) Training

The annual water and wastewater operators' school will be held at Montana State University November 18 - 22, 1974, and based on past experience, 80 to 100 operators will attend this session. The quarterly newsletter will also be continued.

The portion of the program involving training in local areas for water and wastewater treatment operators was revised during the last half of fiscal year 1974. In this program, the emphasis will now be placed on training personnel in local areas and providing training assistance to the local group leaders as needed. Video-tapes, as developed by Dr. Robert Champlin at the University of Wyoming, will be utilized in this program. Training programs at Billings, Great Falls, Missoula, Kalispell and Havre are being established and will continue through fiscal year 1975. This is being done in part with a Section 104(g) (1) of PL 92-550 training grant to the Department of Health and Environmental Sciences, and the grant period is February 15, 1975. Other cities will be considered for this program during the plan year.

Under a second grant (Department of Labor--EPA is the contractor and the Department of Health is the subcontractor, the older local area training program, in which the Department of Health provides classroom and on-the-job training to operators in selected areas for 22 weeks, is being continued--at least until August 31, 1974 (grant termination date). Classes are presently being conducted at Glasgow and Kalispell, and about 40 operators are entered in the program.

The state needs to continue with the local area operator training program, and additional grant funds will be sought to continue existing programs beyond the grant termination dates. The best source of funds at this date appears to be under the Comprehensive Employment and Training Act of 1973, under which a block grant for training is made to the state of Montana. Under the existing training grant, an estimated 100 operators will receive training during fiscal year 1975 with most of these having entered the training program during fiscal year 1974.

The bureau, through the construction grant program and certification program, is able to roughly estimate the training needs for wastewater treatment operators. Training is needed for about 100 operators per year to upgrade their skills and for an additional 50 new entry operators. The cost of training is about \$300 per operator. One way of evaluating the training program is by comparing the percentage of operators taking the training course and passing the certification exam with those not taking the training course and passing the exam.

Training of public facility laboratory personnel for performing the required analyses under the NPDES and MPDES program will receive attention during the year. The larger cities, which will have

greater monitoring responsibilities, are being encouraged to perform the testing for the smaller communities. It is estimated that training will be provided to 12 laboratory personnel by the bureau's laboratory personnel. It is planned to split samples with each new laboratory to compare results if arrangements can be suitably made.

New bureau personnel are mainly trained on the job. The water quality management planning program gives personnel good general training on several program elements. The bureau will provide the opportunity for each professional employee to attend a short outside training course or seminar. Additional training would be advantageous.

(d) Operator Certification

The certification program will continue as in the past with administration of the program provided by the bureau and guidance provided by an advisory board established by law. Examinations will be given twice during the year for all classes, while examinations for the lower two classifications will be given throughout the year. Licenses are reissued each year. An estimated 350 public wastewater treatment operators will be licensed during the year with 70 of these being newly certified by examination.

The state is a charter member of the American Board of Certification (ABC), which is presently formulating a uniform operator certification classification system. The advisory board has taken an active interest in this program.

A summary of municipal operations and maintenance, construction grants, plans and specifications, and training is shown below.

MUNICIPAL OPERATIONS AND MAINTENANCE

	<u>Planned FY 74</u>	<u>Achieved FY 74</u>	<u>Planned FY 75</u>
MWWT Plant Inspections	0	20	150
MWWT Plants Submitting Required Reports	0 required	80 reported	150
MWWT Plant Demonstration Visit Participation (Number)	-	10 (est.)	10

CONSTRUCTION GRANTS

	<u>Number</u>	<u>Dollar Value</u>
Step 1	36	\$ 571,250
Step 2	36	\$ 513,750
Step 3	15	\$ 5,802,250

PLANS AND SPECIFICATIONS REVIEW FOR CONSTRUCTION GRANTS

	Achieved <u>FY 74</u>	Planned <u>FY 75</u>
Review	2	20

OPERATOR TRAINING

	MGMT/10 or 15 mgd SUPERVISORY		PROCESS CONTROL ⁴ OPERATORS	
	<u>Total</u>	<u>Plan</u>	<u>Total</u>	<u>Plan</u>
	<u>Need</u>	<u>FY 75</u>	<u>Need</u>	<u>FY 75</u>
Receiving Training:				
Entry	0	0	50	30
Upgrade	0	0	100	70
Certification ₁	0	0	600 ₂	400 ₂
Estimated Cost	0	0	45,000	29,000
Total Employees	0	0	4 ₃	6 ₃

1. Includes entry and upgrade.
2. Instructor time provided.
3. Includes employees providing only a portion of their time to training.
4. Includes lab, maintenance, and other plant personnel as all of these duties normally done by process control operator in typical Montana plant.

WASTE DISCHARGE PERMITS

1. State Legislation

Section 69-4806, R.C.M. 1947 states in part:

It is unlawful to:

- (2) *carry on any of the following activities without a current permit from the department:*
 - (a) *construct, modify, or operate a disposal system which discharges to any state waters; or*
 - (b) *construct or use any outlet for the discharge of sewage, industrial wastes, or other wastes to any state waters; or*
- (3) *violate any limitation imposed by a current permit.*

Section 69-4809.1, R.C.M. 1947 (Duties of Department of Health) states in part:

- (1) *The department shall:*
 - (a) *issue, suspend, revoke, modify, or deny permits to discharge sewage, industrial wastes, or other wastes to state waters, consistently with rules made by the board;*
 - (b) *examine and approve or disapprove plans and other information needed to determine whether a permit should be issued or suggest changes in plans as a condition to issuance of a permit;*
 - (c) *clearly specify in any permit any limitation imposed as to the volume, strength, and other significant characteristics of the wastes to be discharged;*

2. Review of Past Program

A waste discharge regulation was adopted for sanitary sewage and industrial waste discharges to surface waters, and a formal permitting program was initiated during 1968 for these wastewaters. Under the program, 81 industrial and 135 sanitary sewage waste discharge permits were issued. The larger dischargers were required to submit monitoring information on their effluent. During 1972, a waste discharge permit regulation for confined animal feeding was adopted by the board. This regulation required all operations feeding cattle, swine, sheep, or other livestock for marketing

purposes within any confined area or enclosure which is not normally used for raising crops or as a pasture, which, at any time discharges drainage water or manure to a state water or is causing or contributing to air pollution, to have a waste discharge permit. Permits were required of all new or expanding operations, and existing operations were required to have a permit before June 24, 1974. Under the program, several meetings were held with feeder organizations to explain the permit program, and 32 permits have been issued to date.

The Federal Water Pollution Control Act Amendments of 1972, PL 92-500, established the National Pollutant Discharge Elimination System whereby the federal government is authorized to issue permits for the discharge of pollutants into the nation's streams. The act provides for states with adequate water pollution control programs to take over administration of the federal permit program in their state. To avoid duplication of effort by state and federal governments, the state is taking steps to administer the federal NPDES program. As the first step, the state law was revised during the 1973 legislative assembly to give definite authority for requiring monitoring, additional enforcement authority, including increased fines and permission for the state to establish effluent and pre-treatment standards. In addition, the Board of Health and Environmental Sciences adopted a rule entitled the Montana Pollutant Discharge Elimination System (MPDES) on January 18, 1974. The MPDES rule became effective on March 8, 1974 and provides the additional program elements needed by the state to comply with rules and regulations promulgated by the administrator of the U. S. Environmental Protection Agency pursuant to Section 304(h) of the act. Section 304(h) relates to the state program elements necessary to administer the NPDES program.

In accordance with Section 402 of the act, Governor Thomas L. Judge of the state of Montana applied to the administrator of the EPA for permission to administer the NPDES program on March 11, 1974. Following the public hearing on April 20, 1974, and if the administrator approves the state's program, the Department of Health and Environmental Sciences plans to begin issuing waste discharge permits under NPDES in Montana.

3. Strategy

The Department of Health and Environmental Sciences will issue MPDES permits to all substantial dischargers in Montana by December 31, 1974. MPDES permits are those permits issued in Montana by the department under the NPDES permit program, which was established pursuant to Section 402 of the act. In addition, the department will prepare draft permits for all dischargers in Montana presently required by the act and regulations by December 31, 1974. All major dischargers in the state should be under NPDES permit or at least to public notice by June 1, 1974. All NPDES permits issued by EPA will serve as MPDES permits until their date of expiration. The department will issue MPDES permits to approximately 41 municipal dischargers (including commercial concerns) with sanitary wastes, 24 industrial dischargers, and 60 agricultural dischargers (including 15

irrigation concerns) during fiscal year 1975. In addition, the department expects to receive applications for MPDES permits from approximately 200 animal confinement facilities through fiscal year 1975. It is estimated that most of the aforementioned animal confinement facilities will be of the size exempted from NPDES requirements by the Federal Register, July 5, 1973, Vol. 38, Number 128, Part III. These numbers are only estimates, however, because of the present lack of adequate inventory information on these point sources. It is not expected that the department will renew any MPDES permits during fiscal year 1975. The NPDES permits issued by EPA expire at the earliest in early fiscal year 1976.

The department's priorities (from the highest priority to the lowest priority) for issue of waste discharge permits are as follows:

- (a) New and expanding discharges.
- (b) Major discharges to water quality limited segments for which there is adequate background water quality data.
- (c) Major discharges to effluent limited segments.
- (d) Major discharges to water quality limited segments for which there is inadequate background water quality data.
- (e) Minor discharges to water quality limited segments for which there is adequate background water quality data.
- (f) Minor discharges to effluent limited segments.
- (g) Minor discharges to water quality limited segments for which there is inadequate background water quality data.

It should be noted that the above priority list applies to those discharges (municipal, industrial and agricultural) that have not been issued an NPDES permit by EPA. Renewals of issued MPDES permits, if any arise during the fiscal year, will also be handled in accordance with the above priority list. The water quality limited segments, both with and without adequate background water quality data and the effluent limited segments are those segments identified in this program plan. The individual dischargers priority listing for permits yet to be issued during fiscal year 1975 are shown on Tables 4, 5 and 6.

The department intends to initiate compliance monitoring on dischargers under MPDES permit at the beginning of fiscal year 1975. All major industrial and municipal dischargers under MPDES permit will be monitored by the department for compliance with applicable effluent limitations and compliance schedules at least once during fiscal year 1975. In addition, approximately 50 percent of the minor dischargers under permit will be monitored for compliance during fiscal year 1975. Due to excessive laboratory loads resulting from the department's water quality management planning efforts, the major portion of the compliance monitoring will be undertaken during the latter half of fiscal year 1975. The compliance

monitoring is discussed in more detail in the monitoring section of this program plan.

The periodic self-monitoring information received by the department will be reviewed immediately upon receipt and prepared for eventual inclusion into a computerized data storage system. The self-monitoring information will be considered during the scheduling of compliance monitoring activities, and those dischargers that appear to be violating the effluent limitations of their MPDES permits will be monitored for compliance more frequently than those that appear to be in compliance with their effluent limitations.

It is the goal of the department to ensure that best practical control technology and best available control technology effluent limitations are met by all industrial dischargers by July 1, 1977 and July 1, 1983, respectively, as required by the act and further defined by EPA regulations. It is also the goal of the department to achieve no discharge of pollutants to state waters by July 1, 1985.

A summary of the fiscal year 1974 and fiscal year 1975 NPDES and MPDES program is shown on Table 7.

TABLE 4. MUNICIPAL PERMIT PRIORITY LIST

<u>PRIORITY</u>	<u>SEGMENT CODE</u>	<u>DISCHARGER</u>	<u>NPDES NUMBER</u>
1	0104	Three Forks	MT 0020401
2	0101	Twin Bridges	MT 0020885
3	0101	Whitehall	MT 0020133
4	0101	Sheridan	MT 0022098
5	0101	Virginia City	MT 0020150
6	0201	Laurel	MT 0020311
7	0204	Fromberg	MT 0021466
8	0201	Yellowstone Boys Ranch	MT 0020460
9	0201	Yellowstone Co. School	
		District #2	MT 0022870
10	0801	Rosebud County Commissioners	
		(Colstrip)	MT 0022373
11	0801	SID #305 (Worden-Ballantine)	MT 0020346
12	1002	Libby	MT 0020494
13	1001	Eureka	MT 0021725
14	0502	Whitefish	MT 0020184
15	0502	Columbia Falls	MT 0020036
16	0502	Bigfork	MT 0020397
17	1101	Plevna	MT 0021776
18	0601	Cut Bank	MT 0020141
19	0601	Shelby	MT 0020214
20	0601	Kevin	MT 0020842
21	0701	Sunburst	MT 0021679
22	0601	Valier	MT 0021792
23	0701	Big Sandy	MT 0022454
24	0601	Joplin	MT 0021768
25	0701	Rudyard	MT 0021661
26	0701	Hingham	MT 0021300
27	0701	Gildford	MT 0021717
28	0702	Chinoook	MT 0020125
29	0702	Harlem	MT 0021270
30	0702	Dodson	MT 0021415
31	0702	Malta	MT 0020389
32	0702	Saco	MT 0020473
33	0702	Hinsdale	MT 0021881
34	0702	Valley County SID #2	MT 0021610
35	0702	Nashua	MT 0022144
36	1501	Roundup	MT 0021652
37	1501	Ryegate	MT 0020451
38	1501	Melstone	MT 0020427
39	1501	Harlowton	MT 0020354
40	1501	Grass Range	MT 0020176
41	1501	Winnett	MT 0020702

TABLE 5. INDUSTRIAL PERMIT PRIORITY LIST

<u>PRIORITY</u>	<u>SEGMENT CODE</u>	<u>DISCHARGER</u>	<u>NPDES NUMBER</u>
1	0103	Glacier Mountain Cheese	MT 0000507
2	0201	Yellowstone River Fish Hatchery	MT 0001007
3	0502	Flathead Lake Salmon Hatchery	MT 0000124
4	0801	Decker Coal Company	MT 0022900
5	1601	Union Texas Petroleum, Wibaux	MT 0020931
6	1101	Union Texas Petroleum, USAI-15	MT 0020320
7	0601	Big West Oil Company	MT 0000469
8	0702	Amoco Production Company	MT 0022829
9	1501	Jo Burns Brown	MT 0022691
10	0801	Atlantic Richfield	MT 0020257
11	0801	Atlantic Richfield	MT 0020265
12	1101	Gary Operating Company	MT 0022403
13	1101	Gary Operating Company	MT 0022411
14	1101	Gary Operating Company	MT 0022420
15	1101	Gary Operating Company	MT 0022438
16	1101	Gary Operating Company	MT 0000680
17	1101	Gary Operating Company	MT 0000639
18	1101	Gary Operating Company	MT 0000809
19	1101	Gary Operating Company	MT 0000787
20	1101	Gary Operating Company	MT 0000647
21	1101	Gary Operating Company	MT 0000612
22	1101	Gary Operating Company	MT 0000604
23	1101	Gary Operating Company	MT 0000710
24	1101	Gary Operating Company	MT 0000833

TABLE 6. AGRICULTURAL PERMIT PRIORITY LIST

<u>PRIORITY</u>	<u>SEGMENT CODE*</u>	<u>DISCHARGER</u>	<u>NPDES NUMBER</u>
1	0305	Eidel Ranch, Inc.	MT 0022781
2	0602	Crary Ranch & Livestock	MT 0022748
3	0301	Kenneth C. Gourley	MT 0022209
4	0601	Montana Sanfoin Feeders, Inc	MT 0022888
5	0301	Blake M. Tippetts	MT 0022217
6	1301	Phil Tadej Ranch Co.	MT 0022730
7	0702	Westin Livestock Co.	MT 0022306
8	1301	Peterson Ranch Co.	MT 0022853
9	0301	F. L. Spencer	MT 0022446
10	0201	Munroe Feeders	MT 0022225
11	1501	Madox Land & Cattle Co.	MT 0022764
12	0204	Earl R. Spencer	MT 0022624
13	0301	McLeod Farms	MT 0022497
14	0101	Westco Feeders, Inc.	MT 0022276
15	0702	Hinsdale Livestock Co.	MT 0022519
16	1101	Valley Vu Feeders	MT 0022268
17	1401	Nash Bros. Inc.	MT 0022233
18	1301	L. R. Ranch Co.	MT 0022802
19	1101	Reuben Schroeber	MT 0022721
20	1101	C. E. Cattle Company	MT 0022772
21	0103	Low Line Canal Co.	MT 0022977
22	0103	High Line Canal Co.	MT 0022845
23	0101	East Bench Irrigation Dist.	MT 0022934
24	0401	Bitterroot Trout Farm	MT 0022349
25	0301	Earnest Barfus	MT 0022241
26	0103	Norman Irvine	MT 0022365
27	0702	Alfalfa Valley Irrigation D.	MT 0022942
28	0702	Zurich Irrigation District	MT 0023132
29	0701	Gildford Drainage Co.	MT 0021717
30	0305	Greenfield Irrigation Dist.	MT 0023124
31	0601	Paul Odegard	MT 0022331
32	1001	Gale Johnston	MT 0022357
33	0801	Big Horn Low Line Ditch Co.	MT 0022918
34	0201	Canyon Creek Ditch Co.	MT 0022861
35	0201	Billings Bench Water Assn.	MT 0022837
36	0201	Jumping Rainbow Ranch	MT 0000868
37	0201	Duane Hooper	MT 0022250

*Segment codes will be included in the final draft.

TABLE 7. FISCAL YEAR 1975 PERMITS SUMMARY

PROPOSED FINAL PERMIT CONDITIONS DRAFTED (to be Issued by EPA)	PLANNED FY 74		ACHIEVED FY 74		PLANNED FY 75	
	WOL	EFL	WOL	EFL	WOL	EFL
<u>INDUSTRIAL</u>						
MAJOR	0	0	0	0	0	0
MINOR	5	6	5	6	0	0
<u>MUNICIPAL</u>						
MAJOR	0	0	0	0	0	0
MINOR	4	20	4	20	0	0
<u>AGRICULTURAL</u>						
MAJOR	0	XX	0	XX	0	XX
MINOR	5	XX	5	XX	0	XX
<u>PERMITS ISSUED (BY STATE)</u>						
<u>INDUSTRIAL</u>						
MAJOR	0	0	0	0	0	0
MINOR	0	0	5	1	2	22
<u>MUNICIPAL</u>						
MAJOR	0	0	0	0	0	0
MINOR	0	0	4	0	3	38
<u>AGRICULTURAL</u>						
MAJOR	0	XX	0	XX	0	XX
MINOR	0	XX	5	XX	60	XX
<u>PERMITS CERTIFIED (TO BE ISSUED BY EPA)</u>						
<u>INDUSTRIAL</u>						
MAJOR	8	5	8	5	0	0
MINOR	50	31	50	31	0	0
<u>MUNICIPAL</u>						
MAJOR	5	3	5	3	0	0
MINOR	8	55	8	55	0	0
<u>AGRICULTURAL</u>						
MAJOR	0	XX	0	XX	0	XX
MINOR	7	XX	7	XX	0	XX
			Yes			

PLANNING

1. State Legislation

Section 69-4809.1 (Duties of the Department of Health) states in part:

(1) *The department shall:*

(d) *collect and furnish information relating to the prevention of water pollution;*

2. Review of Past Program

Under Federal Regulation 18CFR601.32 and .33 dated July 2, 1974, states were required to provide water quality management plans for river basins, metropolitan and regional areas. In 1971, planning was initiated in areas where construction grants were contemplated. Without an interim basin, regional, metropolitan, or project plan, EPA construction grants could not be obtained. The Water Pollution Control Act Amendments of 1972 set forth additional planning requirements; and for grants made after July 1, 1975, a river basin, as outlined by Section 303(e) of the act, plan must be completed. The basin plan outlines the needs and priorities of the particular river basin as it pertains to water pollution control.

In fiscal year 1973, the Water Quality Bureau developed a continuing planning process for Montana. This report outlines the methodology and strategy to be used in preparing basin plans in Montana. The planning process is part of an overall state master plan for water quality and is coordinated with other agency water, land, and natural resources plans.

In fiscal year 1973, the Water Quality Bureau began basin-wide detailed water quality investigations. In October of 1973, the detailed water quality management plan for the Little Missouri basin was completed. A public hearing was held, and the plan was submitted to the Environmental Protection Agency for approval. This was the first plan completed by the department.

In March, 1974, the draft quality management plans for the Kootenai River basin and the Missouri-Sun-Smith River basin were completed.

For grants made after April 30, 1974, a facility plan as outlined in 40CFR Part 35, must be completed for the state-designated planning area.

Section 208 of the act provides grants to areas having special water quality problems which extend over local jurisdictional boundaries to

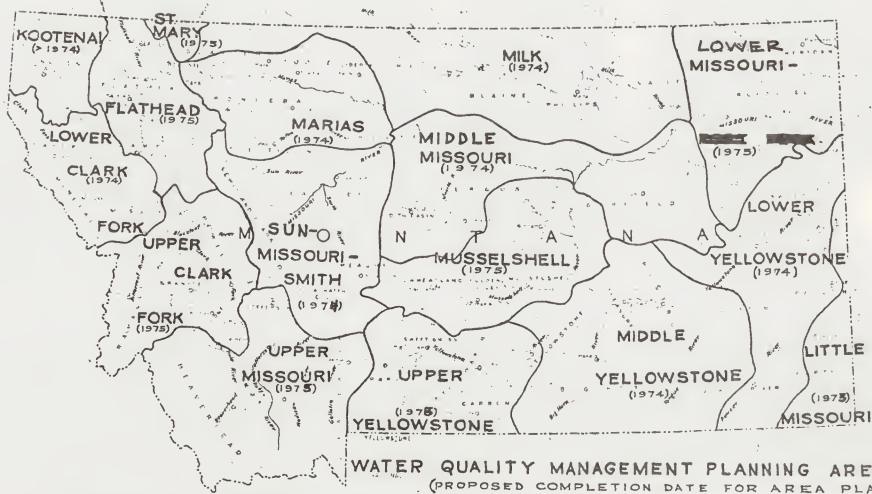
develop an overall plan for the area. As part of plan preparation, local governments within the designated area are expected to establish an agency or agencies for implementing the water quality management plans and the implementing agency or agencies would be the only ones which could receive sewage treatment works construction grants.

Two areas (Billings and Flathead-Lake) have indicated an interest to date in Section 208 planning, and meetings have been held in these areas to explain the 208 program. Designation of 208 eligible areas by the governor must first be preceded by determination of area boundaries by the local governments involved, resolutions by the local governments agreeing to cooperate in the program and to select a single planning agency, and a public hearing or meeting conducted by the state. After designation by the state, approval must still be obtained by EPA. Funding for 208 designated areas is quite limited and not all areas wanting the program will receive designation and grants.

3. Strategy

- (a) Section 201 planning. It will be the responsibility of the municipality applying for a construction grant to complete a facility plan. In accordance with the department's priority formula, the municipalities which have priorities for facility planning grants (step 1) are shown in Table 3, page 13. The priority formula used for determination of grant funding for fiscal year 1975 is shown as Appendix C. All of the projects shown (44 total) on Table 3 should complete facility plans during the fiscal year or be essentially completed with them.
- (b) Section 208 planning. The Water Quality Bureau with the assistance of EPA upon request, will meet with groups interested in 208 planning. Assistance will also be provided in assembling the application material. There appears to be six areas in the state where Section 208 may be applicable (Billings, Flathead, Great Falls, Butte, Bozeman and Missoula), but the Billings and Flathead areas appear to be the most promising.
- (c) Section 303(c) planning. The water quality management basin planning areas are shown on Figure 1. Priority ratings for the development of plans were developed using basin population and area, predominant stream classification, number of dischargers, and potential for development. The actual priority system used is shown in the "Continuing Planning Process for Montana." The schedule for completion of the basin plans is shown on Table 8. Some of the basin plans will require considerably more work than others, and for this reason, a basin with high priority may be completed after a basin with lower priority.

FIGURE 1.



WATER QUALITY BUREAU
MONTANA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL SCIENCES

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All the basin plans are being prepared by the bureau with some assistance provided through contract work. The primary manpower effort is being devoted to monitoring, which will be used in identifying basin problems. Monitoring for the initial plans will be essentially completed by the middle of the plan year.

The Billings office staff has the primary responsibility for completing the Upper Yellowstone, Middle Yellowstone, Lower Yellowstone, Little Missouri, Middle Missouri, Lower Missouri, and Musselshell plans. The Kalispell office staff is responsible for the Flathead, Lower Clark Fork, Kootenai, and St. Mary plans. The Helena office staff is responsible for the Upper Missouri, Sun-Missouri-Smith, Marias, Milk, and Upper Clark Fork plans.

A team approach is being used for preparation of the plans, and as a minimum, a chemist, biologist, sanitary engineer, hydrogeologist, and soils scientist will supply input to each plan. Other agencies such as the Soil Conservation Service, Forest Service, State Departments of Natural Resources and Conservation, Fish and Game, and Intergovernmental Relations will also supply input to the plans.

The minimum content of the basin plan, along with planning methodology, is set forth in 40CFR Part 131. In order to complete all basin plans by July 1, 1975, it will be necessary to limit the detail of the effluent limited segments. These plans will be considered a preliminary attempt to develop a comprehensive plan for these areas, and they will be upgraded in subsequent years.

The completed plan will be utilized as the basis of establishing priorities for surveillance, construction grants, and permit issuance. The plan will also be used to more fully assess the water pollution control needs and the need for additional monitoring and other work within the basin. It will review the existing water quality standards and recommend changes where changes are needed. It will outline the protection needed for areas of potential development. It will further identify water quality limited and effluent limited segments.

In some segments designated water quality limited, waste load allocation studies are being conducted as part of the water quality management plan. Investigations of the Gallatin River, Clark Fork River below Missoula, Silver Bow Creek, the Upper Clark Fork River, and the Flathead drainage were conducted in fiscal year 1974. All of these projects were completed in fiscal year 1975 and will be included as part of the water quality management basin plan.

The basin study will concentrate mainly on sources of point source pollution but will include a small amount of work to

generally identify non-point sources of pollution. More intensive basin studies, which are planned at a later date for areas showing problems, while including additional surveillance information on point discharges, will concentration on non-point source problems. This will be where the major output of water pollution control efforts will need to be placed in the future.

The general status of planning is shown below:

	<u>Planned FY 74</u>	<u>Achieved FY 74</u>	<u>Planned FY 75</u>
303E Basin Plans Completed (approved by EPA)	5	1	15
WQL Segment Analyses Completed	1	1	3
Basins with all WQL Segment Analyses Completed	7	5	2

Facilities Plans:

Delineated Areas Submitted to R.A. (To be submitted with Step 1 applications)	-	2	34
Plans Completed	5	3	36

Areawide Planning: Entire state nondesignated by governor. Reviews for future ~~plans~~ designations expected for two areas.

The status of individual water quality management plans is shown as Table 8.

TABLE 8. STATUS OF WATER QUALITY MANAGEMENT PLANS

<u>BASIN</u>	<u>CLASSI- FICATION</u>	<u>PRIORITY</u>	<u>PROPOSED COMPLETION DATE WQM PLAN</u>	<u>STATUS OF PLAN</u>	<u>PERCENT COMPLETED</u>
Missouri-Sun-Smith	EL	A	June, 1974	Draft report completed	75
Upper Yellowstone	EL	A	May, 1975	Active	50
Upper Clark Fork	EL	A	June, 1975	Active in April, 1974	15
Upper Missouri River	EL	A	May, 1975	Active	50
Flathead	WQL	A	April, 1975	Active	50
Kootenai	EL	B	April, 1974	Draft report completed	85
Middle Yellow- stone	EL	B	October, 1974	Active	50
Lower Clark Fork	EL	B	December, 1974	Active in April, 1974	10
Marias	EL	B	September, 1974	Active	50
Milk	EL	B	November, 1974	Active	30
Lower Yellowstone	EL	B	December, 1974	Active	60
St. Mary	EL	B	June, 1975	Active	15
Middle Missouri	EL	C	November, 1974	Active in May, 1974	5
Lower Missouri*	EL	C	June, 1975	Active in May, 1974	5
Musselshell	EL	C	June, 1975	Active in May, 1974	5
Little Missouri	EL	C	October, 1973	Completed and approved by EPA	95

*The Missouri-Fort Peck name has been changed to Lower Missouri.

NOTE: The priorities are determined from a consideration of factors discussed in the fiscal year 1974 report. The priorities are:

- A - Highest priority--will require the most effort in the investigation and control of pollution.
- B - Moderate priority--will require a moderate effort in the investigation and control of pollution.
- C - Lowest priority--will require the least effort in investigation and control of pollution.

DATA COLLECTION FOR 303(e) PLANS

<u>WATER QUALITY SEGMENT</u>	<u>TYPE DISCHARGES</u>	<u>DATA NEEDS</u>	<u>COMPLETION DATE</u>
Flathead Drainage (0502) ¹	1 Major	Algal Assay, Nutrient Balance, Nutrient Sources	September, 1974
Lower Clark Fork (0902) (Columbia Drainage)	2 Major 4 Minor	Biological, Chemical, Color, DP	December, 1974
Milk River (0701)	1 Major 13 Minor	Coliforms, BOD, DO, Nutrients	November, 1974
Upper Blackfoot (0402)	0 Major 0 Minor	Mine Drainage	March, 1975
Missouri River (0304) (Canyon Ferry to Holter Dam)	0 Major 1 Minor	Nutrient Balance, Algal Popu- lations, Waste Load Allocation	October, 1974
Galen Creek and Dry Fork Belt Creek (0302)	0 Major 0 Minor	Mine Drainage	December, 1974
Armstrongs Creek (0801)	0 Major 0 Minor	Surface and Ground Water Quality, Coal Development	September, 1974

1. Basin-Segment Code

MONITORING

1. Review of Past Program

Until fiscal year 1972, the state accomplished little water quality monitoring due to inadequate funding. During fiscal years 1972 and 1973, manpower increased five-fold, additional laboratory equipment was purchased, and computer processing of data was initiated.

In fiscal year 1974, monitoring for basin water quality management plans for the Kootenai, Little Missouri, and Missouri-Sun-Smith drainages was completed, and was started or continued on the remaining 13 basins. Five primary, permanent, in-stream water quality stations were established, and monitoring began on a quarterly basis. Twenty-three major industrial and nine major municipal dischargers, plus 50 percent of the smaller municipalities, were compliance-monitored. A lake monitoring program, funded through an EPA waste allocation grant, was initiated in Flathead Lake and 12 smaller lakes in the Flathead River drainage. A citizen-volunteer program was also utilized to collect Secchi disc readings on 16 lakes in the area. A limnologist was added to the staff in fiscal year 1974 and initiated a qualitative biological monitoring program for streams, a statewide lake eutrophication survey, and established an algal bioassay capability in the Helena laboratory.

Monitoring of the Clark Fork River above and below Missoula (in cooperation with EPA), the Gallatin River drainage, and the Flathead River drainage was performed in conjunction with waste load allocation studies. Groundwater monitoring was conducted in Gallatin and Silver Bow counties. Information for a bibliography of Montana water quality data was collected from the bureau and other agencies and universities. New laboratory capabilities included purchase of an auto-analyzer, total organic carbon analyzer, micro-Kjeldahl apparatus, research-model specific conductance bridge, algal bioassay equipment, and 100 feet of laboratory bench. A draft of a field procedures manual was prepared, and work began on a laboratory procedures manual. A quality control program for collection and analysis of water samples was initiated. A revision of the data processing program was begun to provide an interface with the EPA STORET system and provide for machine storage and processing of state water quality data. The usefulness of present water quality parameters was reviewed and more meaningful parameters for water quality and compliance monitoring were established. Present laboratory includes six analysts, one major and two small laboratories capable of analyzing a total of 2,500 samples per year with an average of ten parameters per sample; currently, 58 parameters can be tested in the laboratories.

2. Surveillance and Monitoring Needs

- (a) Complete necessary monitoring for water quality management planning for 13 basins.
- (b) Finish first draft of laboratory procedures manual and complete the field procedures manual.
- (c) Purchase additional equipment and instrumentation for field sampling.
- (d) Complete and implement formal laboratory program for precision and accuracy control.
- (e) Complete and begin routine use of the revised water quality data processing system.
- (f) Expand program for monitoring of industrial and municipal discharges to provide increased input for planning, waste load allocation, and permit compliance monitoring.
- (g) Increase the number of permanent monitoring stations for waters which may show significant changes in water quality due to factors such as population changes, new industries, mining, logging, irrigation, water quality improvement projects.
- (h) Develop criteria for judging relative significance of lakes to allow use of a priority for study.
- (i) Complete a qualitative biological survey of major streams and begin quantitative surveys in selected areas.
- (j) Begin algal bioassay and nutrient studies on known significant eutrophic lakes and determine if there are other eutrophic lakes in the state.
- (k) Accurately determine the total lake area in Montana.
- (l) Complete and publish a bibliography of water quality studies completed in Montana.

3. Strategy

As in fiscal year 1974, the principal monitoring effort in fiscal year 1975 will be to identify water quality problems, including effluent discharges, in basins for which water quality management plans are being prepared. Monitoring for all initial basin water quality management plans will be completed during fiscal year 1975. Major streams and problem areas will be sampled and analyzed for major ions, flow, BOD, coliforms, pH, temperature, toxic metals, nutrients, specific conductance, turbidity, and selected additional constituents. Numerous partial analyses of small streams will also be conducted. As sampling for water quality management plans is completed for the river basins, permanent in-stream stations will be established to provide information on water quality trends. These will complement the EPA and other agency stations already established. The

number of permanent in-stream water quality stations will be doubled during fiscal year 1975 from five to ten. The locations of all stations are:

<u>Location</u>	<u>Established</u>	<u>Legal Description</u>	<u>Frequency</u>
Belt Creek 1.6 miles above the Missouri River	FY 74	T21N, R5E, S12, DDB	Quarterly
Box Elder Creek at USGS Gaging Station east of Mill Iron	FY 75	T2N, R62E, S31	Quarterly
Bridger Creek at Federal Fish Hatchery	FY 74	T1S, R6E, S34, BCD	Quarterly
Clark Fork near Phosphate	FY 75	T9N, R10W, S4, CCC	Monthly
Clark Fork at Deer Lodge	FY 75	T7N, R9W, S9, BAB	Monthly
East Gallatin River at bridge above confluence with Thompson Creek	FY 74	T1N, R5E, S18, CBB	Quarterly
Flathead River at Holt above Flathead Lake	FY 74	T27N, R20W, S23, CCA	Quarterly
Little Beaver Creek at Montana-North Dakota line	FY 75	T6N, R62E, S35	Quarterly
Shields River 0.3 mile above the Yellowstone River	FY 74	T1S, R10E, S26, BAB	Quarterly

Parameters to be monitored are: major ions, nutrients, flow, BOD, coliforms, toxic metals, pH, specific conductance, temperature and turbidity. Qualitative quarterly biological assessments initiated in fiscal year 1974 on the original five permanent monitoring stations will be expanded to include the new stations.

In addition to the permanent stations maintained by the bureau, the EPA has established the following stations for the National Water Quality Surveillance System (NWQSS):

- Yellowstone River upstream Billings
- Yellowstone River downstream Billings
- Yellowstone River upstream Miles City
- Yellowstone River at Sidney

Flow, temperature, specific conductance, pH, dissolved oxygen, COD, turbidity, TDS, TSS, nutrients, carbon and bacteriological parameters

will be determined bi-weekly, common ions quarterly at all stations, radiological determinations at Miles City and Sidney quarterly, metals monthly at the Billings stations and quarterly at Miles City and Sidney, pesticides seasonally at Miles City and Sidney, and oil and grease downstream of Billings bi-weekly.

The state will do a limited amount of monitoring during the year to determine compliance or noncompliance with effluent limitations contained in waste discharge permits. The major portion of the compliance monitoring activities will be undertaken during the second half of fiscal year 1975 because of excessive laboratory loads during the first half of the year resulting from the department's water quality management planning efforts. It is planned to monitor all major municipal and industrial dischargers in the state at least once during the fiscal year. This will amount to monitoring eight municipal and 13 industrial discharges. The major discharges to be monitored are:

<u>Major Industrial Dischargers</u>	<u>Location</u>
American Smelting and Refining Company	East Helena
Anaconda Company	Anaconda
Anaconda Company	Butte
Anaconda Company	Great Falls
Continental Oil Company	Billings
Exxon Company	Billings
Farmers Union Central Exchange, Inc.	Laurel
Great Western Sugar Company	Billings
Hoerner-Waldorf Corporation	Missoula
Holly Sugar Company	Sidney
Montana Power Association	Billings
Phillips Petroleum Company	Great Falls
St. Regis Paper Company	Libby

The discharges will be monitored for the parameters listed in Table 9.

TABLE 9. PARAMETERS TO BE MONITORED FOR MAJOR INDUSTRIAL DISCHARGES

MAJOR INDUSTRIAL DISCHARGERS	PARAMETERS																	
	Flow	Temperature	DO	BOD ₅	COD	TSS	Cl ₂	pH	Oil and Grease	Ammonia	Sulfides	Sulfates	Heavy Metals	Phenolics	Color	Fecal Coliform	Hardness	Alkalinity
ASARCO, East Helena	x	x				x		x					x					
Anaconda Company, Anaconda ¹	x	x				x		x				x	x				x	x
Anaconda Company, Butte	x					x		x				x	x				x	x
Anaconda Company, Great Falls ²	x			x		x	x	x	x				x			x		
Continental Oil Company, Billings	x	x		x	x	x		x	x	x	x		x	x				
Exxon Company, Billings	x	x		x	x	x		x	x	x	x		x	x				
Farmers Union, Laurel	x	x		x	x	x		x	x	x	x		x	x				
Phillips Petroleum, Great Falls	x	x		x	x	x		x	x	x	x		x	x				
Great Western Sugar Company, Billings ³	x	x	x	x	x	x		x		x						x		
Holly Sugar Company, Sidney ³	x	x	x	x	x	x		x		x						x		
Hoerner-Waldorf, Missoula	x	x		x		x								x	x			
St. Regis Paper, Libby	x	x		x	x	x	x	x						x	x			
Montana Power, Billings	x	x				x		x										

1. This discharge will also be monitored for turbidity, specific conductance, TDS, Kjeldahl nitrogen, and orthophosphate.
2. The intake process water for these discharges will be sampled for TSS, arsenic, and copper.
3. The intake process water for these discharges will be sampled for BOD₅, COD, TSS, and fecal coliforms.

MAJOR MUNICIPAL DISCHARGES

Billings sewage treatment plant
Bozeman sewage treatment plant
Butte sewage treatment plant
Great Falls sewage treatment plant
Havre sewage treatment plant
Helena sewage treatment plant
Kalispell sewage treatment plant
Missoula sewage treatment plant

The parameters to be monitored at each major municipal discharge are: flow, BOD₅, nutrients, total suspended solids, fecal coliforms, pH, and total residual chlorine.

In addition, the state will monitor 50 percent of the minor municipal and industrial dischargers in the state during fiscal year 1975. A total of 58 minor municipal and 42 minor industrial dischargers will be monitored. The minor municipal dischargers will be monitored for the parameters of temperature, specific conductance, flow, BOD₅, TSS, pH, and fecal coliforms. Total residual chlorine will be monitored where effluent chlorination is practiced. The minor industrial dischargers will be monitored for parameters specified in the monitoring requirements of the discharge permits.

Compliance monitoring will be done more frequently in cases where there is believed to be a substantial difference between the discharge information submitted by the discharger and the bureau's data and when the data submitted by the industry or municipality indicates violation of waste discharge permit stipulations.

It is anticipated that about 100 municipal water supplies, both surface and groundwater, will be sampled and analyzed in fiscal year 1975. In addition, an estimated 300 samples from private water supplies will be analyzed in fiscal year 1975.

The waste load allocation study on the Flathead River drainage was not funded in time to do field work during the 1973 spring and early summer runoff. The project, originally scheduled to be completed in June 1974, has been extended in time by the EPA to October 1974. This will allow important runoff data to be incorporated into the waste load allocation analysis.

A list of all lakes with fisheries potential has been obtained, and preliminary inventory of eutrophic lakes has been made and their approximate areas determined (Table 10). During fiscal year 1975, criteria will be developed judging the relative significance of lakes, the estimate for total lake area in the state will be refined, and the area of significant lake will be determined. Statewide inquiries will be made to locate

TABLE 10. INVENTORY OF LAKES

Total number of publicly owned fresh water lakes	2,000
Total number of significant lakes	500 (estimated)
Number of significant lakes exhibiting noticeable eutrophy	24
Number of significant lakes exhibiting no noticeable eutrophy	
Number of significant lakes for which eutrophication status is not known	476
Total area of publicly owned fresh water lakes (acres)	900,000
Total area of significant lakes (acres)	600,000 (estimated)
Area of significant lakes exhibiting noticeable eutrophy	200,000 (160,000 for Flathead)
Area of significant lakes exhibiting no noticeable eutrophy	
Area of significant lakes for which eutrophication status is not known	400,000

additional eutrophic lakes and a literature search will be made to determine probable causes of problems in known eutrophic lakes. In conjunction with this program, an estimated 20 samples will be analyzed for nutrients and 15 algal bioassays will be completed.

The bureau is cooperating with personnel of the National Eutrophication Survey Program. In this program, several lakes and their tributary streams will be monitored for a year to determine their eutrophic status. The bureau will serve as the coordinating state agency for this program and provide necessary support functions, including preliminary selection of lakes (see following list) and training of volunteer personnel.

PRELIMINARY LISTING OF LAKES TO BE INCLUDED IN THE NATIONAL SURVEY PROGRAM

<u>Name</u>	<u>Location</u>
Nelson	T31N R31E
Tiber	T30N R04E
Yellowtail (Big Horn)	T09S R28E
Tongue River Reservoir	T08S R40E
Georgetown	T05N R14W
Hebgen	T11S R03E
Clark Canyon	T10S R10W
Flathead	T22N R19W
MacDonald	T32N R18W
Whitefish	T31N R22W
Tally	T30N R23W
Seeley	T16N R15W
Swan	T25N R18W
Mary Ronan	T25N R22W

The analytical quality control program initiated in fiscal year 1974 will be continued and strengthened.

Frequency of precision and accuracy checks will vary with the parameter, but an average of one sample in 15 will be a precision-control duplicate. Accuracy control will consist of spiking an average of one in 15, except for those parameters such as BOD, TSS, pH, where spiking is not a valid procedure. Standard reference samples for trace metals, minerals, nutrients, and demand constituents will be run in duplicate on a monthly basis to serve as additional precision and accuracy controls. Arrangements have been made with the EPA laboratory in Denver to split samples.

A laboratory procedures manual will be written and put into use at all three laboratories. Automatic laboratory filtration equipment will be evaluated in fiscal year 1975, and if suitable, may be purchased. Additional field equipment and instrumentation will be purchased,

increasing the capability for simultaneous field sampling. A field kit for investigating fish kills is being developed and will be available to the bureau and Montana Fish and Game Department personnel in fiscal year 1975. Several new or modified procedures of analysis will be tested. Sample output should increase from 2,500 in fiscal year 1974 to approximately 3,000 per year in fiscal year 1975. The extensive revision of our present water quality data processing program should be completed in fiscal year 1975. It is planned to produce an annual computer-generated summary of water quality analyses. The water quality bibliographic data assembled in fiscal year 1974 will be compiled, edited, and completed in fiscal year 1975. A contractual agreement for this project has been written, and the bibliography of water quality studies completed in Montana should be published in fiscal year 1975.

A state water quality inventory report to Congress will be required by each state on April 15, 1975. This plan will be prepared by the bureau during fiscal year 1975 and will include the following elements:

- (a) An inventory of discharges to streams and lakes in the state that violate 1974 state water quality standards. For discharges regulated by the Montana Pollutant Discharge Elimination System, the compliance schedules will be shown.
- (b) A description of water quality problems in streams, including problems from non-point sources.
- (c) Recommendations for actions needed to solve or abate the state's pollution problems.
- (d) An estimate of costs for actions needed to solve state problems in those cases where data exists and costs can be estimated.
- (e) A brief narrative summary of the state's pollution control posture.

Table 11 summarizes monitoring information by basin, which will be obtained during fiscal year 1975.

Intensive surface water surveys will be conducted as part of the 303e basin management plans. Such surveys for fiscal year 1975 will be in the following basins

- 02 Upper Yellowstone Basin
- 04 Upper Clark Fork
- 05 Flathead
- 06 Marias
- 07 Milk
- 08 Middle Yellowstone
- 09 Lower Clark Fork
- 11 Lower Yellowstone
- 12 St. Mary
- 13 Middle Missouri
- 14 Lower Missouri
- 15 Musselshell

Intensive surveys will be performed on the major streams in the basin. Completion dates correspond to those listed in Table 8.

In addition, intensive surveys will be performed on the following segments:

- 0302 Hughesville acid mine drainage study. Study area consists of Galena Creek and tributaries and the Dry Fork of Belt Creek from Galena Creek to Belt Creek. The study will determine the extent of acid mine drainage and heavy metal loadings contributed to the Dry Fork and treatment feasibility. Field sampling will be completed by December 31, 1974.
- 0502 Flathead basin waste load allocation study. Study area consists of the Swan River above Flathead Lake, Flathead River above the lake, and below the lake to Kerr Dam, Flathead Lake, and 12 smaller lakes in the basin. The objective is to determine eutrophication levels of the lakes and develop a nutrient budget for the area. Survey and field sampling will be completed by August 31, 1974.
- 0801 Colstrip water quality study. Project objective is to obtain baseline water quality information and assess the potential impact of coal-fired generating plants to be erected at Colstrip on the water quality of all streams within 100 km of Colstrip. Completion date for field sampling and surveys is August 15, 1974.

TABLE 11

MONITORING

BASIN CODE 01 Upper Missouri Basin

INTENSIVE SURFACE 2/
WATER SURVEYSSTATIONS IN PRIMARY MONITORING NETWORK^{1/}
CHEMICAL AND PHYSICAL BIOLOGICALPERMIT
COMPLIANCE INSPECTIONSSEGMENTS TO BE
EVALUATED FOR NPS

SEGMENT CODE	3/			3/			3/			3/			3/		
	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75
01	1	1	0/0	0	0	0/0	0	0	0/0	2	3	2/1	0	0	0/0
02	1	1	0/0	0	0	0/0	0	0	0/0	0	0	0/0	0	0	0/0
03	2	2	0/0	2	2	0/0	0	2	2/2	2	3	3/2	0	0	0/0
04	1	1	0/0	0	0	0/0	0	0	0/0	1	1	2/1	0	0	0/0

BASIN CODE 02 Upper Yellowstone Basin

01	0	0	1/0	1	1	1/1	0	1	1/1	6	6	4/1	0	0	0/0
02	0	0	1/0	0	0	0/0	0	0	0/0	0	0	0/0	0	0	0/0
03	0	0	1/0	0	0	0/0	0	0	0/0	0	0	2/1	0	0	0/0
04	0	0	1/0	0	0	0/0	0	0	0/0	6	6	15/7	0	0	0/0

BASIN CODE 03 San-Missouri-Smith Basin

01	1	1	0/0	0	0	0/0	0	0	0/0	5	9	7/3	0	0	0/0
02	1	1	1/1	1	1	1/1	0	1	1/1	1	1	1/0	0	0	0/0
03	1	1	0/0	0	0	0/0	0	0	0/0	0	0	0/0	0	0	0/0
04	2	2	0/0	0	0	0/0	0	0	0/0	7	10	4/2	0	0	0/0
05	1	1	0/0	0	0	0/0	0	0	0/0	6	8	6/3	0	0	0/0

SEGMENT CODE	INTENSIVE SURFACE ^{2/} WATER SURVEYS			STATIONS IN PRIMARY MONITORING NETWORK ^{1/}						PERMIT COMPLIANCE INSPECTIONS			SEGMENTS TO BE EVALUATED FOR NPS		
	^{3/}			^{3/}						^{3/}			^{3/}		
	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75	PLANNED FY 74	ACHIEVED FY 74	PLANNED FY 75
BASIN CODE	04 Upper Clark Fork Basin														
01	0	0	1/1	0	0	0/0	0	0	0/0	0	0	3/2	0	0	0/0
02	0	0	1/1	0	0	0/0	0	0	0/0	0	0	0/0	0	0	0/0
03	0	0	1/1	0	3	3/3	0	0	3/3	6	6	13/8	0	0	0/0
BASIN CODE	05 Flathead Basin														
01	0	0	1/0	0	0	0/0	0	0	0/0	0	0	1/0	0	0	0/0
02	1	^{4/} 1	1/0	1	1	1/1	0	1	1/1	5	6	4/2	0	0	1/0
BASIN CODE	06 Marias Basin														
01	0	0	1/1	0	0	0/0	0	0	0/0	6	15	3/2	0	0	0/0
02	0	0	1/1	0	0	0/0	0	0	0/0	2	6	0/0	0	0	0/0
BASIN CODE	07 Milk River Basin														
01	0	0	1/1	0	0	0/0	0	0	0/0	0	3	0/0	0	0	0/0
02	0	0	1/1	0	0	0/0	0	0	0/0	3	10	11/5	0	0	0/0
BASIN CODE	08 Middle Yellowstone Basin														
01	0	0	2/2	0	0	0/0	0	0	0/0	6	8	7/4	0	0	0/0

SEGMENT CODE	INTENSIVE SURFACE 2/ WATER SURVEYS			STATIONS IN PRIMARY MONITORING NETWORK 1/ CHEMICAL AND PHYSICAL			BIOLOGICAL			PERMIT COMPLIANCE INSPECTIONS			SEGMENTS TO BE EVALUATED FOR NPS		
	3/ PLANNED FY 74	3/ ACHIEVED FY 74	3/ PLANNED FY 75	3/ PLANNED FY 74	3/ ACHIEVED FY 74	3/ PLANNED FY 75	3/ PLANNED FY 74	3/ ACHIEVED FY 74	3/ PLANNED FY 75	3/ PLANNED FY 74	3/ ACHIEVED FY 74	3/ PLANNED FY 75	3/ PLANNED FY 74	3/ ACHIEVED FY 74	3/ PLANNED FY 75
BASIN CODE 09 Lower Clark Fork Basin															
01	0	0	1/0	0	0	0/0	0	0	0/0	2	2	2/1	0	0	0/0
02	2	2	1/0	0	0	0/0	0	0	0/0	4	7	6/3	0	0	0/0
BASIN CODE 10 Kootenai River Basin															
01	1	1	0/0	0	0	0/0	0	0	0/0	1	1	0/0	0	0	0/0
02	1	1	0/0	0	0	0/0	0	0	0/0	3	5	2/1	0	0	0/0
BASIN CODE 11 Lower Yellowstone Basin															
01	0	0	1/1	0	0	0/0	0	0	0/0	6	6	9/5	0	0	0/0
BASIN CODE 12 St. Mary Basin															
01	0	0	1/1	0	0	0/0	0	0	0/0	0	0	0/0	0	0	0/0
BASIN CODE 13 Middle Missouri Basin															
01	0	0	1/1	0	0	0/0	0	0	0/0	0	0	3/2	0	0	0/0
BASIN CODE 14 Lower Missouri Basin															
01	0	0	1/0	0	0	0/0	0	0	0/0	1	1	1/1	0	0	0/0
BASIN CODE 15 Musselshell Basin															
01	0	0	1/0	0	0	0/0	0	0	0/0	1	1	8/4	0	0	0/0

SEGMENT CODE	INTENSIVE SURFACE ^{2/} WATER SURVEYS			STATIONS IN PRIMARY MONITORING NETWORK ^{1/}						PERMIT COMPLIANCE INSPECTIONS			SEGMENTS TO BE EVALUATED FOR NPS		
	^{3/}			^{3/}			^{3/}			^{3/}			^{3/}		
	PLANNED	ACHIEVED	PLANNED	PLANNED	ACHIEVED	PLANNED	PLANNED	ACHIEVED	PLANNED	PLANNED	ACHIEVED	PLANNED	PLANNED	ACHIEVED	PLANNED
	FY 74	FY 74	FY 75	FY 74	FY 74	FY 75	FY 74	FY 74	FY 75	FY 74	FY 74	FY 75	FY 74	FY 74	FY 75
BASIN CODE	16 Little Missouri Basin														
01	1	1	0/0	0	0	2/2	0	0	2/2	1	1	2/1	0	0	0/0
STATE TOTAL	17	17	23/13	5	8	10/10	0	5	10/10	83	125	121/63	0	0	1/0

Footnotes

- ^{1/} Stations of the National Water Quality Surveillance System not shown in this list.
- ^{2/} Includes monitoring for water quality management planning. Basins for which monitoring will extend over two or more fiscal years are listed as planned and completed in the terminating year only.
- ^{3/} The two numbers indicate:
- | | |
|---|---|
| surveys, stations, etc. to be
completed in FY 75 | number expected to be completed
by January 1, 1975 |
|---|---|
- ^{4/} Time extension received in October, 1974.

GROUNDWATER

1. Review of Past Program

Groundwater studies were made at a number of sites. At the request of the bureau, the Hoerner-Waldorf Corporation in Missoula expanded their groundwater monitoring network to examine the extent of groundwater pollution and the general area hydrogeology.

Exxon Corporation in Billings, after installing an oil interceptor trench, indicated that underground oil seeps near the Yellowstone River are being successfully intercepted.

Burlington Northern at Whitefish examined the groundwater problem and installed an interceptor trench to stop oil seepage into the Whitefish River.

Bureau staff investigated gasoline pollution of groundwater in Missoula and groundwater pollution from sugar refinery wastes in Billings. Oil in groundwater near Farmers Union Central Exchange refinery in Laurel was also examined as a cooperative program with industries.

In a cooperative program with the Montana Bureau of Mines and Geology, the bureau did some work on groundwater in the Colstrip area to determine pollution effects of coal developments. Groundwater quality was examined in conjunction with subdivision surveys in Gallatin and Silver Bow counties to see if there is pollution from septic tanks. Groundwater quality was examined in cooperation with the U. S. Geological Survey in the Helena valley and a nearby subdivision (Colorado Gulch). Information was gathered from numerous states on groundwater pollution regulations.

2. Strategy

The investigation of groundwater at Hoerner-Waldorf in Missoula will continue both as a bureau project and as part of a contract between Hoerner-Waldorf and the University of Montana. Additional sampling will be done by the U. S. Geological Survey in the Helena valley and the bureau will examine groundwater pollution from septic tanks in Colorado Gulch and in the Kalispell area. Groundwater pollution from plywood wastes will be examined at C & C Plywood Company near Kalispell. Work on groundwater pollution from coal developments will continue and work will be started on groundwater pollution in the Middle Missouri from saline seeps.

Work will commence on drafting a groundwater pollution regulation for Montana and principal aquifers in the state will be designated. The groundwater aquifers needing evaluation are shown on Table 12.

TABLE 12. NONPOINT SOURCE AND GROUNDWATER POLLUTION

<u>BASIN NEEDING EVALUATION</u> <u>(SEGMENT CODE)</u>	<u>DRAINAGE AREA</u> <u>(SQ. MILES)</u>	<u>PRINCIPAL TYPE OF NONPOINT SOURCE PROBLEM</u>
Grasshopper Creek 0102	200 (est.)	Sediment - metals
Clark's Fork - Yellowstone 0204	2,800	Sediment
Muddy Creek 0305	315	Sediment
Upper Clark Fork 0402	100	Metals
Upper Clark Fork 0403	2,000	Metals
Flathead 0502	2,000	Nutrient loadings
Marias 0602	500 (est.)	Salinity
Milk River 0702	23,000	Sediment, coliform

GROUNDWATER

<u>GROUNDWATER AQUIFER</u> <u>NEEDING EVALUATION</u>	<u>AREAL EXTENT</u> <u>(SQ. MILES)</u>	<u>EST. VOL. OF WATER</u> <u>(ACRE-FT x 10⁶)</u>	<u>PREDOMINANT POLLUTION PROBLEM</u>
Holocene Alluvium (Colorado Gulch near Helena)	50 (est.)	unknown	Sewage infiltration
Ft. Union	5,000 (est.)	unknown	Salinity due to coal mining
Pleistocene Pediment (North Montana)	1,000 (est.)	unknown	Nitrate from shale
Pleistocene Glacial Till	50,000 (est.)	unknown	Saline seep
Ft. Union	10,000 (est.)	unknown	Saline seep
Cretaceous Sandstones	25,000 (est.)	unknown	Saline seep
Helena Valley	150 (est.)	unknown	Septic tank pollution
Outlying areas near Libby	30 (est.)	unknown	Septic tank pollution
Holocene Alluvium	30 (est.)	unknown	Kraft mill wastes

NON-POINT SOURCE POLLUTION

1. State Legislation

Section 69-4801 (Public Policy of the State) states in part:

- (2) *It is not necessary that wastes be treated to a purer condition than the natural condition of the receiving stream. "Natural" refers to conditions or material present from runoff or percolation over which man has no control or from developed land where all reasonable land, soil and water conservation practices have been applied. Conditions resulting from dams at the effective date of this act are "natural."*

Section 69-4802 (Definitions) states in part:

- (5) *"Pollution" means such contamination, or other alteration of the physical, chemical or biological properties, of any state waters, as exceeds that permitted by Montana water quality standards, including but not limited to standards relating to change in temperature, taste, color, turbidity, or odor, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any state waters as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to public health, recreation, safety, or welfare, or to livestock, wild animals, birds, fish or other wildlife, provided, however, that any discharge which is permitted by Montana water quality standards is not "pollution" for the purposes of this chapter;*

Section 69-4806 (Pollution Unlawful--Permits) states in part:

It is unlawful to:

- (1) *cause pollution as defined in section 69-4802 (5), R. C. M. 1947, of any state waters or to place or cause to be placed any wastes in a location where they are likely to cause pollution of any state waters;*

Regarding subdivisions, Section 69-5001 states:

It is the public policy of this state to extend present laws controlling water supply, sewage disposal, and solid waste disposal to include individual wells affected by adjoining sewage disposal and individual sewage systems to protect the quality and potability of water for public water supplies and domestic uses; and to protect the quality of water for other beneficial uses, including uses relating to agriculture, industry, recreation and wildlife.

2. Review of Past Program

An oil and hazardous spill contingency plan was developed during fiscal year 1973 and was printed and distributed during fiscal year 1974. Oil spill inspections and reporting have been coordinated with the EPA, Department of Fish and Game, and the Oil and Gas Conservation Division of the Department of Natural Resources and Conservation. During fiscal year 1974, substantial improvements were provided in the oilfields in the Clarks Fork - Yellowstone River drainage. This area was the source of many of the spills which occurred in former years.

Studies have been made in the past of acid mine drainage to Sand Coulee Creek and the Dry Fork of Belt Creek. Contract studies should be completed during fiscal year 1974 of acid mine drainage problems in the Jefferson River drainage and mine-mill wastes in the Butte-Anaconda area.

Sediment due to erosion is a problem which has received little attention by the bureau because of the wide-spread nature of the problem and the extensive amount of monitoring to define problem areas. A problem area which has begun to receive extensive attention is saline seep. Senate Bill 737 passed by the 1974 legislature provides \$275,000 to the Department of State Lands to determine the extent of the problem and develop control procedures.

Since 1961, the state has had a subdivision law and regulation to assure that adequate water supplies and sewage disposal facilities are provided. The law and regulation are administered by the Water Quality Bureau. The law requires approval of the subdivision plats, plans and specifications by the Department of Health and Environmental Sciences before filing with the county clerk and recorder.

3. Strategy

- (a) Oil and Hazardous Spills. Oil spill inspections and reporting will be coordinated with the EPA, Department of Fish and Game, and the Oil and Gas Conservation Division of the Department of Natural Resources and Conservation. The bureau will also cooperate with adjacent states, EPA, and adjoining provinces in Canada to provide a regional contingency plan.
- (b) Acid Mine Drainage. In cooperation with the Department of Natural Resources and Conservation and through an EPA grant to the Department of Natural Resources, a plan is being prepared to control acid mine drainage in the Galena Creek drainage near Monarch. A similar grant has been obtained, and a study is being made in the headwaters of the Upper Yellowstone River drainage. In conjunction with the preparation of the Upper Clark Fork River water quality management plan, additional information will be obtained on the acid mine

drainage in the upper Blackfoot River drainage near Lincoln, and plans for future intensive study and control will be outlined.

- (c) Subdivisions. Substantial manpower effort will be required for subdivision review as it relates to prevention of water pollution. An estimated 300 subdivisions will be reviewed, and the majority of these will provide subsurface disposal as their means of sewage disposal.
- (d) Sediment. In approaching non-point sediment water pollution problems, the goal of the Water Quality Bureau will be to reduce or eliminate existing problems and avoid or minimize similar problems in the future. This can best be done through cooperation with other governmental agencies and organizations with this common interest.

Abatement of non-point sources will require expenditure of a considerable amount of state resources. As the first step, the problem areas must be identified in a general manner. This will be done through the water quality management plans. On-site investigations will be needed to provide a brief definition of the nature and extent of the problem. These preliminary investigations will require follow-up monitoring programs designed to characterize the pollutants and their effect on the receiving water as well as determine the activity or activities causing the pollution. During and after completion of the monitoring programs, many groups and individuals with expertise on the particular problems identified will be contacted to discuss feasible alternatives that should be considered in the abatement attempts. Guidelines outlining possible abatement techniques will be developed utilizing the information gained from the field work and the experts. The experience and information gained through working with the existing non-point pollution programs, hopefully, can be used to avoid similar problems in the future.

Senate Bill 401 to control soil erosion was introduced at the 1973 session of the legislature. This bill was patterned after the model act as prepared by the Council of State Governments. The bill was held over to the 1974 session, and hearings were held on it in the interim. The bill was killed in the 1974 session.

SJR 0052, a joint resolution of the House and Senate, was passed by the 1974 legislature. It states in part:

NOW, THEREFORE, BE IT RESOLVED BY THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA:

That the Department of Natural Resources and Conservation and the Resource Conservation Advisory Council in cooperation with the Montana Association of Conservation Districts, the Department of Health and Environmental Sciences, and other interested parties make a thorough study of the sediment control problem, and existing legislation, and recommend to the 1975 Legislative Session appropriate

legislation, including proposed rules and standards implementing such legislation, establishing a statewide program for the control of soil erosion and sediment damage.

This year's principal activity will be in identifying existing problems in the areas where water quality management plans are being completed and reviewing plans for proposed projects that have the potential for creating sources of pollution from erosion. Input will be supplied for the legislation and proposed rules and standards as mentioned in SJR 0052. Through the Water Pollution Advisory Council, identified serious problems will be reviewed and recommendations for correction formulated.

Sediment is considered to be the principal water pollution problem existing in the state at this time. For this reason, it is recommended that the proposed EPA intensive monitoring surveys be used in identifying non-point source problems due to sediment. Priorities for these surveys are suggested as follows:

- i. Milk River drainage below Fresno Dam
 - ii. Muddy Creek drainage (tributary to Sun River)
 - iii. Clarks Fork - Yellowstone River drainage
- (e) Saline seep. The saline seep problem described in Appendix D occurs mainly in the Middle Missouri drainage (Figure 1). Its present and potential effects on ground and surface water quality has not yet been fully identified. Work proposed by the Department of State Lands should help considerably in accomplishing this. The bureau will cooperate as manpower allows to aid in this program. Some information on surface water quality and the effects of saline seep on it will be obtained through the water quality management plan on the Middle Missouri River. An intensive survey by EPA in the saline seep area would also be of assistance.
- (f) Nutrients. Nutrients from non-point sources are indicated to be present or potential problems in both the Flathead River drainage and the segment of the Missouri River between Toston and Townsend. Additional field work needs to be done in both areas to determine the source of the nutrients.

ENFORCEMENT

1. State Legislation

Enforcement remedies are contained in Sections 69-4820, 69-4820.1, 69-4821, 69-4824, 69-4824.1 and 69-4825. The penalty provisions are contained in Section 69-4824. Section 69-4820.1 states:

(1) *In addition to all remedies created by this act, the department is authorized to take appropriate enforcement action to:*

- (a) *prevent, abate, and control the pollution of state waters;*
- (b) *prevent, abate, and control any violation of a condition or limitation imposed by a permit issued under section 69-4806, R.C.M. 1947;*
- (c) *prevent, abate, and control any violations of regulations relating to pretreatment standards.*

2. Review of Past Program

The 1955 state water pollution control law provided some enforcement procedures; however, they were much too cumbersome to be effective. Revisions made in 1971 provide better enforcement procedures as do the enforcement provisions added in 1973. Stiffer penalty provisions were also added in 1973. The most effective enforcement tool in the past has been abatement orders, compliance schedules, and other administrative actions.

The state attorney general is the statutory attorney for the department, and the department attorneys have been commissioned as special assistant attorney generals to bring all actions on the part of the state of Montana. State law makes the county attorney the public prosecutor, and he is responsible for attending the district court and conducting on behalf of the state all prosecutions for public offenses and represents the state in all matters and proceedings to which it is a party. The state attorney general has no authority to institute criminal actions in any counties of the state. This is the duty of the county attorney in which the violation occurred.

3. Strategy

During fiscal year 1975, an engineer within the bureau will have approximately 0.25 man year to devote to coordinating enforcement within the bureau. Field personnel located at Helena, Kalispell and Billings will be available

for providing on-site inspections and investigations. Assistance of the Department of Fish and Game will be solicited and utilized in some investigations. In addition, the bureau will utilize the department's legal unit (three attorneys) where legal action is warranted. EPA has offered the assistance of their legal personnel, and their assistance will be requested where it appears they can better handle the situation.

The two main priorities this year are:

1. Establish definite uniform procedures and guidelines to be used by the Water Quality Bureau in carrying out administrative and judicial enforcement action.
2. Take necessary action to insure compliance with permit conditions of all waste discharge permits issued in Montana.

It is difficult to estimate numbers of enforcement actions; however, we are anticipating approximately 70 compliance actions against discharges from individual sewage disposal systems, at least five non-point source problems, which will require compliance action, and numerous administrative follow-ups on suspected permit violations. No doubt, there will be at least one or two violations requiring action as well as court action for injunctive relief or penalty.

Through redistribution of incentive grant funds by EPA, the department will obtain \$17,519 for the employment of an attorney to work on enforcement as it relates to water pollution control. The department plans to employ an attorney as soon as possible for this purpose. The money is being used in this manner because of the need for greater enforcement capabilities by the Water Quality Bureau.

PUBLIC PARTICIPATION

1. Review of Past Program

A water pollution advisory council is established by law. The council provides recommendations to the Water Quality Bureau on its program.

During fiscal year 1973, the bureau made substantial effort to meet with interested groups to discuss its water pollution control program. A new pamphlet was printed and is distributed to groups and individuals upon request.

A public meeting was conducted in Helena on April 8, 1974 on the proposed fiscal year 1975 program plan.

2. Strategy

A public meeting or hearing will be held on the proposed fiscal year 1976 state program plan in the spring of 1975. A public hearing will be held on the construction grants needs list and priority program in February or March of 1975.

Following completion of a draft of a basin water quality management plan, a public hearing will be held on the plan at some location within the basin. Preliminary input will be solicited for the plans. Through the waste discharge permit program, public notices will be circulated on pending permit applications. Public hearings will be held where the need is indicated.

The state has an environmental impact statement requirement, which is patterned after the federal act. An estimated 30 statements will be prepared during the plan year, and these will be distributed to selected state and federal agencies, local groups, and interested citizens. The Environmental Sciences Division has a technical writer who is responsible for coordinating and editing the impact statements. The impact statement appears to be the best means of keeping people informed on pending significant approvals by the bureau.

The bureau is requesting the assistance of EPA in recommending additional ways of obtaining better public involvement in the water pollution control program. Blasser, Zeni, and Company have been contracted by EPA to provide recommendations to the bureau on this topic.

BUDGET AND MANPOWER RESOURCES

Table 13 shows the budget and manpower estimated to be devoted to the different program elements during fiscal year 1974 and fiscal year 1975. The resources are about the same for both years.

There will be some shifting of resources during the plan year--mainly from planning and monitoring to the permits element. This shift is necessary as the state has made application to administer the National Pollutant Discharge Elimination System program. Considerable money was spent in fiscal year 1974 to better equip the laboratory, and no major equipment will probably be purchased during fiscal year 1975. Some automated equipment was purchased during fiscal year 1974, which should allow a greater number of samples to be run with the same number of laboratory personnel. Reducing the planning resources may require re-questing of time extensions for two or three of the basin plans later in the plan year.

The resources shown do not permit much work in the non-point source pollution area. As guidelines are set forth to control these sources, additional resources will be required in future fiscal years.

A summary of the sources of funds for the water quality program is shown below.

EPA Program Grant Funds

Base Grant	\$152,493
Permits Incentive	43,836
Municipal Facilities Incentive	40,183
Planning Incentive	23,135
Compliance Monitoring Incentive	14,612
Enforcement Special Grant	<u>17,519</u>

TOTAL EPA PROGRAM GRANT	\$291,778
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EPA Operator Training Grants	\$ 18,000
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Bureau of Reclamation Sample Analysis Contract	\$ 7,620
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State Funds

Operator Licensing	\$ 10,000
Department of Natural Resources and Conservation Contract on Colstrip area	4,722
General Fund Budget	<u>205,000</u>

TOTAL STATE FUNDS	<u>\$219,772</u>
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TOTAL BUDGET	\$537,120
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TABLE 13. BUDGET AND MANPOWER RESOURCES

	FEDERAL FUNDS ^{1/}			STATE FUNDS ^{2/}			TOTAL ^{3/}		
	Planned FY 74	Actual FY 74	Planned FY 75	Planned FY 74	Actual FY 74	Planned FY 75	Planned FY 74	Actual FY 74	Planned FY 75
MFC and OM Personnel	26,000 3.6		47,000 2.5	19,000 <u>4/</u>		10,000 1.2	45,000 3.6		57,000 3.7
Permits Personnel	39,000 4.8		80,000 6.0 ^{5,7/}	28,000 <u>4/</u>		53,000 ^{5,7/} 3.0 ^{5,7/}	67,000 4.8		133,000 9.0
Planning Personnel	69,406 ^{6/} 3.1 ^{6/}		40,000 3.2	50,000 <u>4/</u>		31,000 1.7	119,406 7.1		71,000 4.9
Monitoring Personnel	88,000 8.5		76,620 4.7	64,000 <u>4/</u>		41,000 3.0	152,000 8.5		117,620 7.2
Enforcement Personnel	5,000 0.5		17,519 ^{8/} 1.0 ^{8/}	3,000 <u>4/</u>		16,000 ^{8/} 0.8 ^{8/}	8,000 0.5		33,519 1.8
Training Personnel	24,000 2.0		18,000 1.1	13,000 <u>4/</u>		10,000 0.4	37,000 2.0		28,000 1.5
Administration Personnel	7,000 0.4		30,000 ^{9/} 0.8 ^{9/}	5,000 <u>4/</u>		6,000 ^{9/} 0.2 ^{9/}	12,000 0.4		36,000 ^{9/} 1.0 ^{9/}
Public Participation Personnel	9,000 0.9		0 0	7,000 <u>4/</u>		10,981 0.5	16,000 0.9		10,981 0.5
Non-point Sources Personnel	30,852 3.6		8,259 0.6	21,000 <u>4/</u>		41,741 3.2	51,852 3.6		50,000 3.8
Program Element Total Personnel	298,258 31.4		317,398 19.9	210,000 41		219,722 14.0	508,258 31.4 ^{10/}		537,120 33.9 ^{10/}

- 1/ Includes federal funds from all sources.
- 2/ Includes all state funds applied.
- 3/ Includes all man-years applied at state level to include contracts and EPA/IPA.
- 4/ Included with first column under federal funds.
- 5/ Includes EPA engineer assigned to state in permit program (budget not included).
- 6/ Does not include \$130,000 EPA waste allocation grant, which was made in FY 1973.
- 7/ Includes for FY 1975 2.5 man-years and \$43,000 total state and federal money for water quality surveillance and compliance monitoring.
- 8/ Water quality surveillance (including pollution investigations due to point source discharges) and compliance monitoring are shown under permits.
- 9/ Includes water quality standards and regulations, office supplies, printing, rent, utilities, budgeting, and personnel records.
- 10/ Includes Department of Fish and Game biologist assigned to staff. Cost figures do not include budget.

PRIORITY LIST

Community	Stream Segment	Water Use	Population Served	Scope of Project	Phase Construction	Total Points
Three Forks	6	6	2	30		94*
Whitefish (Birch Point)	8	6	2	15		81*
Missoula	8	6	3	30	30	77
Three Forks	6	6	2	30	30	74
Flaxville	6	2	1	15		74*
Great Falls	4	4	3	30	30	71
Victor	6	6	1	40		53
Miles City	6	2	2	40		50
Poplar	6	2	2	40		50
Blgs 6th Ave. N. Int.	4	2	3	40		49
Glasgow	4	2	2	40		48
Whitefish	8	6	2	30		46
Gallatin Co. RID 305	8	6	2	30		46
Bozeman	8	4	3	30		45
Bigfork	8	6	1	30		45
Livingston	6	6	2	30		44
Dillon	6	6	2	30		44
Libby	6	6	2	30		44
Hamilton	6	6	2	30		44
Red Lodge	6	6	2	30		44
Townsend	6	6	2	30		44
Thompson Falls	6	6	2	30		44
Boulder	6	6	2	30		44
Eureka	6	6	2	30		44
Columbus	6	6	2	30		44
Whitehall	6	6	2	30		44
Butte	8	2	3	30		43
Stevensville	6	6	1	30		43
Manhattan	6	6	1	30		43
Lodge Grass	6	6	1	30		43
Sheridan	6	6	1	30		43
Sunburst	6	6	1	30		43
Absarokee	6	6	1	30		43
Darby	6	6	1	30		43
Ennis	6	6	1	30		43
East Glacier	6	6	1	30		43
Roberts	6	6	1	30		43
Hobson	6	6	1	30		43
Bearcreek	6	6	1	30		43
Lewistown	6	4	2	30		42
Laurel	6	4	2	30		42
Hardin	6	4	2	30		42
Harlowton	6	4	2	30		42
Browning	6	4	1	30		41
Chester	6	4	1	30		41
St. Ignatius	6	4	1	30		41
Valier	6	4	1	30		41
Brady	6	4	1	30		41
Judith Gap	6	4	1	30		41
Rocker	8	2	1	30		41
Idaho	8	2	1	30		41
Sidney	6	2	2	30		40
Forsyth	6	2	2	30		40
East Helena	6	2	2	30		40
Circle	6	2	1	30		39
Big Sandy	6	2	1	30		39

June 6, 1974

MONTANA STATE DEPARTMENT OF HEALTH
AND
ENVIRONMENTAL SCIENCES

Water Quality Bureau
Environmental Sciences Division

MUNICIPAL OR INDUSTRIAL WASTE DISPOSAL

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS Compliance With Minimum Treatment Requirements</u>	<u>REMARKS</u>
ABSAROEKE	600	2	Considerable groundwater enters sewerage system which affects treatment in sewage lagoons. Need sealing of sewers to eliminate infiltration water. Treatment improvements probably also needed.
ALBERTON	250	1	Improvements presently being made which should bring into compliance.
ANACONDA City of Anaconda	12,000	1	Discharged to Anaconda Company ponds where wastewater is evaporated with some seepage occurring. Need for additional sewers to serve outlying areas and outfall sewer to replace ditch.
Anaconda Company	Inorganic	3	Wastewater discharged to huge ponding system.
ASHLAND Community of Ashland	700	-	Sewer system needed to handle existing and expanding population.
St. Labre Mission	250	3	Treatment is by sewage lagoons.
AUGUSTA	300	3	Treatment is by sewage lagoons.
BAINVILLE	250	1	Treatment is by sewage lagoons.
BAKER	2,500	3	Treatment is by sewage lagoons.
BASIN Community of Basin	0		Sewer system and treatment are being planned.
Pacific Silica Co.	Inorganic	1	Wastewater discharged to ponds with no overflow.
BEARCREEK	50	2	Septic effluent discharged to Bear Creek.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
BELFRY	200	1		Sewage lagoon system has no overflow.
BELGRADE	500	1		Non-overflow sewage lagoons provide treatment.
BELLE CREEK	100	2		Improvements are planned to sewage lagoon system.
BELT	600	3		Treatment is by sewage lagoons.
BIGFORK	400	3		Work is needed to repair poor construction in sewerage system. Use trickling filter for secondary treatment.
BIG SANDY	800	2		Treatment is by sewage lagoons. Improvements needed.
BIG SKY OF MONTANA	1,000	1		Resort just starting. Sewage treatment facilities will consist of aerated ponds, storage ponds, filtration, chlorination and final disposal by irrigation.
BIG TIMBER	1,500	3		Area adjacent to river needs connection to city sewerage system to eliminate individual discharges to river. This is planned for 1974.
BILLINGS City of Billings	157,000	2		Wastewater treatment improvements under construction and planned for construction next two years will provide secondary treatment. Substantial contribution of wastes are discharged to city system by meat packing companies. Adjacent areas need to connect to system.
Billings Rendering Company	500	1		Use ponding system with no overflow for wastewater treatment.
Continental Oil Refinery	4,300	3		Wastewater is treated by oil separators and aerated ponds. May need minor improvements under national guidelines.
Exxon Oil Refinery	24,000	3		Wastewater treatment consists of oil separators, aerated ponds and polishing ponds. Minor improvements may be needed to meet national guidelines.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

MUNICIPAL OR INDUSTRIAL	ESTIMATED LOAD <i>Untreated (p.e.)</i>	STATUS <i>Compliance With Minimum Treatment Requirements</i>		REMARKS
Great Western Sugar Company	300,000	2		Improvements needed.
Montana Power Company	Inorganic	1		Discharge of wastewater is essentially cooling water which does not exceed state's water quality standards. Ponds are used to settle solids from other wastewater.
Montana Sulphur Company	0	1		Discharge to surface water is only cooling water.
BONNER U.S. Plywood	200	1		Secondary treatment of sewage provided.
BOULDER AND BOULDER RIVER SCHOOL	2,000	2		Sewage treatment is by sewage lagoons. Chlorination of effluent needed. Other improvements probably needed.
BOX ELDER	200	1		Treatment is by sewage lagoons.
BOZEMAN City of Bozeman	20,000	2		New activated sludge secondary sewage treatment cannot treat entire flow due to deletion of half of units when construction costs exceeded money available. Remainder of sewage receives primary treatment. Adjacent areas need connection to city system.
Vollmer Slaughter- house	500	1		Ponding system with no overflow.
BRADY	200	2		Additional sewage lagoon cell needed to contain all discharge.
BRIDGER	700	2		Treatment is by sewage lagoon.
BROADUS	800	3		Treatment is by sewage lagoons.
BROADVIEW	100	1		Treatment is by sewage lagoons.
BROCKTON	400	1		Treatment is by sewage lagoons.
BROWNING	1,700	3		Treatment is by sewage lagoons.
BUSBY	300	1		Treatment is by sewage lagoons.

-
1. In compliance
 2. Not in compliance
 3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
BUTTE Metro	40,000		2	Activated sludge sewage treatment with sludge incineration. Insufficient sludge handling capacity. Engineering study underway to determine best means of additional sludge handling capacity. Adjacent areas need connection to Metro system.
Anaconda Company	Inorganic		3	Wastewaters following lime addition are pumped to pond where water is clarified and heavy metals removed. Further reduction of flow is expected as additional clarified water is re-used in concentrator. Ponds still being used at Warm Springs to further treat Silver Bow Creek.
Stauffer Chemical Company	Inorganic		2	Wastewater is ponded, evaporated and reused. Improvements are needed to eliminate the discharge of condenser waters and storm waters.
CANYON FERRY (Federal)	80		1	Separate secondary sewage treatment plants serve power plant and village.
CASCADE	700		3	Treatment is by sewage lagoons.
CHARLO	180		1	Lagoon has small overflow which does not reach stream.
CHESTER	900		2	Present treatment provided by single lagoon cell.
CHINOOK	1,800		3	Secondary treatment provided by trickling filter.
CHOTEAU	1,500		3	Treatment is by sewage lagoon.
CIRCLE	950		1	Treatment is by sewage lagoons.
CLYDE PARK	200		-	New sewerage system needed.
COLSTRIP	500		1	Treatment is by sewage lagoon with no overflow. Expansion needed for population increase.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
COLUMBIA FALLS City and State	500	1		Tertiary treatment provided.
Plum Creek Lumber Co.	500	1		Use subsurface disposal of wastewaters.
COLUMBUS	1,150	1		City sewage lagoon system has no overflow during most of the year.
CONRAD	3,000	3		New aerated lagoon and sewage la- goon improvements recently com- pleted.
CROW AGENCY	2,000	2		Lagoon system presently overloaded. Treatment system preceding la- goons under construction. Major contribution of wastewater by carpet mill.
CULBERTSON	800	1		Treatment is by sewage lagoons.
CUSTER	200	1		Lagoon system presently has no overflow.
CUT BANK City of Cut Bank	4,000	3		Treatment is by sewage lagoons.
Westco Oil Co.	1,000	3		Ponding system provides treatment.
DARBY	350	2		Considerable groundwater is picked up by sewerage system, which affects operation of lagoon. Sewers need to be sealed and additional treatment needed.
DEER LODGE City of Deer Lodge	5,000	3		A single cell lagoon provides treatment.
Milwaukee Railroad	100	3		Oils in wastewater discharge are removed in separator system. There is an underground oil problem due to past pipeline breaks and spillage. Some of this oil was removed, but there still may remain a problem.
DENTON	390	3		Treatment is by sewage lagoon.
DILLON	5,000	2		Improvements planned for existing sewage lagoon. May need additional sealing of sewers. Connection of adjacent areas to sewerage system needed.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
DIXON Community of Dixon	0			Sewerage system and lagoon treatment under construction.
Dixon Indian Agency	0	1		Lagoon with no overflow.
DODSON	180	3		Treatment is by sewage lagoon.
DRUMMOND	500	2		Sewage lagoon is overloaded due to pick-up of groundwater by sewer system. Sewers need to be sealed and additional treatment needed.
DUTTON	500	3		Treatment is by sewage lagoons.
EAST GLACIER	400	2		Ponding system provides treatment. Planning for new treatment facilities and serving Glacier Park Lodge.
EAST HELENA City of East Helena	1,700	2		Groundwater enters sewer system, which affects efficiency of sewage lagoons.
American Smelting & Refining Co.	Inorganic	1		Recirculation system recently con- structed to eliminate wastewater which may contain metals. Cool- ing tower recently completed.
Chemetron Cylinder Gas Company	Inorganic	1		
EDGAR	200	1		No overflow from sewage lagoon system.
EKALAKA	600	2		Secondary treatment provided by activated sludge process. Better operation and maintenance of facility needed.
ENNIS	500	2		Sewage treatment is provided by sewage lagoon. Improvements are needed.
EUREKA	1,100	2		Planning underway to add secon- dary treatment to their existing primary treatment facility.
FAIRFIELD	600	3		Treatment is by sewage lagoon.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
FAIRVIEW	900	2		Treatment is by sewage lagoon. Some odor nuisance.
FALLON	100	1		Treatment is by sewage lagoon.
FLAXVILLE	200			Sewerage system under construction.
FORSYTH	1,850	2		Sewage lagoon system needs im- provements. Adjacent area needs connection to sewerage system.
FORT BELKNAP	400	1		Treatment is by sewage lagoons.
FORT BENTON	1,800	1		Treatment is by sewage lagoons. No overflow present. Sewer im- provements needed.
FORT HARRISON	300	1		Sewage lagoons provide treatment. No overflow present.
FORT PECK (Federal)	500	2		Treatment is by sewage lagoon. Improvements needed to prevent nuisance.
FORT SMITH (Federal)	300	1		Treatment is by sewage lagoons.
FRAZER	300	1		Treatment is by sewage lagoons.
FROID	300	1		Treatment is by sewage lagoons.
FROMBERG	350	2		An additional lagoon cell is being planned to provide improved treat- ment.
GALEN STATE HOSPITAL	500	2		Secondary treatment by activated sludge. Treated sewage dis- charged will be chlorinated in near future.
GALLATIN GATEWAY Glacier Mtn. Cheese Company	2,000	1		Improvements needed for existing disposal. No discharge reaches surface water.
GARDINER	500	1		New sewerage and aerated lagoon system recently completed.
GERALDINE	350	3		Treatment is by sewage lagoon.
GEYSER	200			New sewerage system needed.
GILDFORD	200			New sewerage system needed.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

MUNICIPAL OR INDUSTRIAL	ESTIMATED LOAD <i>Untreated (p.e.)</i>	STATUS <i>Compliance With Minimum Treatment Requirements</i>		REMARKS
GLASGOW City of Glasgow	4,700	2		Construction of improvements should be started this year.
Glasgow AFB	1,000	1		Treatment is by sewage lagoons. No overflow present.
Glasgow RID	200	1		Treatment is by sewage lagoons. No overflow present.
GLENDIVE City of Glendive	6,500	2		Minor sewage lagoon improvements are needed.
Montana-Dakota Utilities	Inorganic	1		
Rahr Meat Service	600	1		No overflow from lagoon system.
West Glendive	1,800	3		Sewage lagoons serve as waste-water treatment.
GRASS RANGE	150	1		Sewerage and sewage lagoon system recently completed.
GREAT FALLS City of Great Falls and Black Eagle	100,000	2		Addition of secondary treatment to primary facilities presently underway. Should be completed in about three years. Extension of sewer system to serve adjacent areas needed. Storm sewers to separate storm-sanitary sewers needed.
Anaconda Co.	300	2		Improvements to meet federal guidelines are under construction.
Ayrshire Dairy	300	3		Treatment is by lagoon system. No overflow present.
Burlington Northern	0	3		Treatment is provided by oil separator. Some wastewaters were recently eliminated to reduce oils.
Great Falls Meat Company	6,100	3		Treatment provided by lagoons. Discharge used for irrigation.
Malmstrom AFB	10,000	1		Secondary treatment provided by trickling filter.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

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MUNICIPAL OR INDUSTRIAL	ESTIMATED LOAD <i>Untreated (p.e.)</i>	STATUS		REMARKS
		<i>Compliance With Minimum Treatment Requirements</i>		
Phillips Petroleum Co.	1,000	1		Use oil separators, air flotation for additional oil removal, aerated pond and polishing pond for treatment. May need minor improvements to meet federal guidelines.
HAMILTON City of Hamilton	3,000	2		Considerable groundwater is picked up by sewerage system which affects primary treatment and pond system. Plans are being made to reduce this infiltration water and to construct a new sewage treatment system. Outlying areas need to be connected to sewerage system.
Tolman's Meat Processing Co.	200	3		Ponding system used for treatment.
HARDIN	3,000	2		Sewage lagoon improvements are planned when grant funds become available.
HARLEM	900	3		Secondary treatment provided by activated sludge process. Need better operation and maintenance.
HARLOWTON	1,350	2		New outfall sewer and treatment improvements are needed.
HAVRE City of Havre	11,000	2		New secondary treatment facilities under construction which should be completed in 1974. Adjacent areas need to be connected to city system.
Havre AF Station	200	1		Treatment is by sewage lagoons.
Burlington Northern	200	2		Treatment provided in ponding system. Better oil removal required.
Krezelak Rendering Plant	500	1		Treatment provided in ponding system. No overflow present.
HAYS SCHOOL	100	1		Treatment is by sewage lagoons.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
HELENA City of Helena	23,000		2	Secondary treatment should be completed in 1974. Interceptor sewers to serve adjacent areas needed.
County Hospital	75		1	Treatment is by sewage lagoons. No overflow present.
Mountain View School	100		1	Treatment is by sewage lagoons.
Treasure State Acres	150		1	Treatment is by sewage lagoons. No overflow.
HIGHWOOD	200			New sewerage system under construction.
HINGHAM	260		1	Treatment is by sewage lagoons. No overflow present.
HOBSON	180		3	Treatment is by sewage lagoons.
HOT SPRINGS	650		2	Activated sludge secondary treatment facility is overloaded due to pick-up of groundwater by sewerage system. Sewers need to be sealed.
HUNGRY HORSE Hungry Horse Dam Tour Center	300		1	Use activated sludge secondary treatment.
Hungry Horse Federal Building	100		1	Use activated sludge secondary treatment.
HYSHAM	300		3	Sewage lagoon system provides treatment.
INVERNESS	0		1	Sewage lagoons and sewer system under construction.
JOLIET	400		3	Considerable groundwater enters sewerage system. Improvements have been recently made to existing primary treatment facilities to upgrade treatment.
JOPLIN	300		1	Treatment is by sewage lagoons.
JORDAN	500		1	Treatment is by sewage lagoons.
JUDITH GAP	150		2	New sewage treatment facilities needed.

1. In compliance

2. Not in compliance

3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
KALISPELL City of Kalispell	11,000		2	Construction underway for up- grading present primary treat- ment facilities to secondary and filtration.
C & C Plywood	1,000		3	Dispose of wastewaters in sub- surface. Further investigation needed to determine if there is violation of water quality standards.
KEVIN Town of Kevin	250		1	Treatment is provided by aerated lagoon and polishing pond with discharge to natural pond with no overflow.
Big West Oil Co.	200		1	Treatment is provided by pond.
LAKE McDONALD LODGE (Seasonal)	500		2	Inadequate secondary treatment discharge presently discharges to Snyder Creek. Planning is under- way to provide land disposal of treated wastewater.
LAKESIDE Kalispell AF Station	200		1	Overflow from sewage lagoon system used for irrigation.
LAME DEER	300		3	Wastewater treatment by sewage lagoons.
LAUREL City of Laurel	5,000		2	Secondary treatment is needed following existing primary treat- ment. Reduction of infiltration water needed. Extension of sewer system to serve outlying areas needed.
Burlington Northern and Union Tank Car Company	100		1	Oily wastes are treated in oil separators.
Farmers Union Central Exchange Refinery	2,000		3	Treatment by oil separators, aerated and polishing ponds.
LAVINA	150		3	Treatment is by sewage lagoons.
LEWISTOWN City of Lewistown	6,000		2	Secondary treatment addition to primary treatment being planned. Reduction of groundwater entering sewer system needed. Extension of sewer system to serve additional area is needed.

1. In compliance

2. Not in compliance

3. Further work needed to determine compliance status

MUNICIPAL OR INDUSTRIAL	ESTIMATED LOAD <i>Untreated (p.e.)</i>	STATUS <i>Compliance With Minimum Treatment Requirements</i>		REMARKS
Miller & Winkler Packing Company	2,000	1		Treatment provided by ponding system. No overflow present.
LIBBY City of Libby	3,000	2		Presently planning to add second- ary treatment to existing pri- mary treatment facilities. Work also needs to be done to eliminate infiltration water. Adjacent areas need to be served by city sewerage system.
J. Niels Lumber Division, St. Regis Paper Co.	5,000	2		Use trickling filter secondary treatment facility for domestic sewage treatment. Glue waste- water is reused with no discharge. Major discharge is log pond over- flow which is screened and ponded before discharge. Re- duction of organic material and suspended solids discharged is needed.
Zonolite Division of W. R. Grace & Company	Inorganic	1		Wastewater is ponded and reused. Some problems exist on erosion of overburden piles. Plans are being developed to correct this problem.
LIVINGSTON City of Livingston	6,800	2		Elimination of infiltration water and secondary treatment facili- ties needed. Another problem exists due to oily wastewater dis- charged by Industrial Towel Company to the city system. Adjacent area needs connection to city sewerage system.
Burlington Northern	500	1		Oil removal facilities work very well.
LODGE GRASS	600	2		Lagoon improvements under con- struction.
LOLO (Missoula County RID)	500	1		Secondary treatment provided by activated sludge and lagoons. Interceptor sewer needed to serve adjacent area.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
MALTA	2,200	2		Sewage lagoon improvements needed to accommodate greater loading.
MANHATTAN	800	2		Reduction of infiltration water needed.
MEDICINE LAKE	390	1		Treatment is by sewage lagoons.
MELSTONE	200	3		Treatment is by sewage lagoon.
MILES CITY City of Miles City	9,000	2		Sewage lagoons need improvements to prevent odors. Sewer system needs to be extended to serve adjacent areas.
Miles City Packing Co.	600	1		Ponds used for treatment. No overflow present.
MISSOULA City of Missoula	35,000	2		Secondary treatment facility should be completed during 1974. Adjacent areas need connection to city sewerage system. Additional improvements planned in 1974-75.
Borden Chemical Company	200	1		Wastewater discharged to evaporation ponds.
Evans Products Company	3,000	1		Wastewater discharged to ponds with no overflow. Some groundwater survey work done, which to date indicates no groundwater damage. Additional groundwater work needed.
Fort Missoula	100	2		Subsurface drainfield has failed, which creates nuisance. Connection to city sewerage system is needed.
John R. Daily Meat Company and Western Byproducts Co.	6,000	2		Wastewater discharged to ponding system. Improvements are needed to meet federal guidelines. Company will probably hook onto Missoula city system.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
Hoerner-Waldorf Corporation	414,000	2		Treatment system consists of mechanical clarifier to remove settleable solids and a ponding system to store and seep wastewaters. Surface discharge is only made during high river flow. State Board of Health has established compliance schedule which will require meeting of federal guidelines for BOD and suspended solids by July 15, 1975.
Schramm Meat Packing	200	1		Wastewater discharged to ponds. No overflow present.
MONTANA CITY Permanente Cement Company	Inorganic	1		Ponds receive wastewater.
MOSBY Jet Fuel Refinery	200	3		Treatment provided by ponds.
NASHUA	500	2		Improvements to sewage lagoon system under construction.
NEIHART	0	-		Sewerage system is needed
OPHEIM Town of Opheim	300	1		Treatment is by sewage lagoons.
Opheim AF Station	200	1		Treatment is by sewage lagoons.
OPPORTUNITY	800	2		Sewerage system is needed. Some reports of septic tank and drainfield failure because of high groundwater.
PABLO	200	1		New sewerage system and sewage lagoon system recently completed. No overflow present.
PARK CITY	400	1		Sewage lagoon system has no overflow.
PHILIPSBURG	1,000	3		Treatment is by sewage lagoons.
PLAINS	0	-		Sewerage system and treatment facilities being planned.
PLENTYWOOD	2,400	1		Treatment is by sewage lagoons.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

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MUNICIPAL OR INDUSTRIAL	ESTIMATED LOAD <i>Untreated (p.e.)</i>	STATUS		REMARKS
		<i>Compliance With Minimum Treatment Requirements</i>		
PLEVNA	180	1		Treatment is by sewage lagoons.
POLSON	2,500	3		Treatment is by sewage lagoons.
POPLAR	1,350	2		Treatment is by sewage lagoons. Improvements are needed. Adjacent area needs connection to sewerage system.
RAMSAY	100	2		Sewage treatment under construction.
RED LODGE	1,800	3		Considerable infiltration in sewer system, and survey needs to be made to determine construction work needed to eliminate excess water. Heavy loading placed on treatment system by cannery.
REXFORD	150	1		Use aerated lagoon with irrigation of overflow.
RICHEY	380	3		Treatment is by sewage lagoons.
ROBERTS	200	2		Sealing of sewers and treatment improvements needed.
ROCKER	150	2		No sewage treatment is presently provided.
ROCKY BOY	100	2		Treatment provided by sewage lagoon. Improvements needed to serve additional population.
RONAN City of Ronan	1,300	3		Need connection of outlying areas to city sewerage system.
Consolidated Dairies	4,000	2		Recently installed whey drier to eliminate major waste discharge. Minor improvements still needed.
ROUNDUP	2,100	1		Sewerage system improvements are needed.
RUDYARD	500	2		Treatment is by sewage lagoons. Improvements needed.
RYEGATE	200	1		Treatment is by sewage lagoons.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>STATUS</u> <i>Compliance With Minimum Treatment Requirements</i>		<u>REMARKS</u>
SACO	350	1		Treatment is by sewage lagoons.
ST. IGNATIUS Town of St. Ignatius	600	2		Sewage lagoon installation improvements are needed. Connection of adjacent area to town sewerage system is needed.
St. Ignatius Federal and Church	400	3		Treatment provided by sewage lagoons.
SAVAGE	200	3		Treatment is by sewage lagoon.
SHELBY	3,100	3		Treatment is by sewage lagoons.
SHERIDAN	600	2		Groundwater enters sewer system and affects sewage treatment. Sewers need to be sealed and treatment improvements provided.
SIDNEY City of Sidney	6,000	1		Treatment is by sewage lagoons. Extension of sewer system to serve adjacent areas needed. New out-fall sewer is needed.
Holly Sugar Corp.	330,000	2		Major part of wastewater is re-used following treatment. Treatment of water seeped is needed.
Montana-Dakota Utilities	0	1		Discharge of cooling water does not violate state water quality standards.
SIMMS	0	-		Sewerage system is needed.
STANFORD	500	3		Treatment is by sewage lagoon.
STEVENSVILLE	800	2		Considerable groundwater is picked up by sewerage system which affects sewage lagoon. Plans being made to reduce this infiltration water and to provide treatment improvements
SUNBURST	600	2		Treatment is by septic tank with discharge to natural pond with no overflow.
SUPERIOR City of Superior	500	3		Treatment is by aerated lagoons.

1. In compliance

2. Not in compliance

3. Further work needed to determine compliance status

		STATUS	Page 16
<u>MUNICIPAL OR INDUSTRIAL</u>	<u>ESTIMATED LOAD Untreated (p.e.)</u>	<u>Compliance With Minimum Treatment Requirements</u>	<u>REMARKS</u>
Diamond National Corporation		1	
Lewis Placer Mine	Inorganic	1	Use ponding system to settle solids which should be adequate.
SWEETGRASS	150	3	Treatment is by sewage lagoons.
TERRY	850	3	Treatment is by sewage lagoons.
THREE FORKS	1,150	2	Due to excessive groundwater entering sewer system, existing treatment facilities cannot be used. Sealing of sewers and sewage treatment improvements are planned.
THOMPSON FALLS City of Thompson Falls	400	1	Lagoon serves areas below tracks. No overflow present. Considerable seepage is present.
U. S. Antimony Corporation	Inorganic	1	Ponding and wastewater reuse system used for mill with no overflow to creek.
TOWNSEND	1,350	2	Considerable groundwater enters sewer system. Planning for reducing infiltration water and providing sewage treatment improvements.
TRIDENT Ideal Cement Co.	60	1	Activated sludge secondary treatment plant treats domestic sewage. Small amount of cooling water discharged.
TROY	0	-	Subsurface disposal is presently used. Sewerage system is needed.
TURNER	100	1	Treatment is by sewage lagoons. No overflow present.
TWIN BRIDGES Town of Twin Bridges	600	1	Treatment is by sewage lagoons. No overflow present.
Montana Children's Center	200	3	Treatment is by sewage lagoons.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

MUNICIPAL OR INDUSTRIAL	ESTIMATED LOAD <i>Untreated (p.e.)</i>	STATUS <i>Compliance With Minimum Treatment Requirements</i>		REMARKS
ULM	0	-		Sewerage system needed.
VAUGHN Community of Vaughn	200	2		New treatment facility under construction.
Big Sky Vista Sub- division	50	1		Sewer system improvements are needed. Plan to have common treatment system with Vaughn.
VICTOR	400	2		New sewerage system needed.
VIRGINIA CITY	200	1		New sewerage and sewage lagoon system recently completed.
WARM SPRINGS STATE HOSPITAL	2,000	2		Sewage discharged to sewage lagoon system. Treatment improvements needed to improve quality of discharge and eliminate nuisance.
WEST YELLOWSTONE	1,200	1		Sewage treatment facilities consist of activated sludge second day treatment, sewage lagoon and seepage ponds.
WHITEFISH City of Whitefish	3,000	2		Considerable groundwater is picked up by sewerage system which affects operation of sewage lagoons. Also need improved treatment facilities and connection of outlying areas, particularly Big Mountain Resort and Ptmarigan properties.
Burlington Northern	200	1		Treatment improvements recently completed.
WHITEHALL	1,000	3		Sewage treatment provided by sewage lagoons. Sewers need to be extended to serve adjacent areas.
WHITE SULPHUR SPRINGS	1,000	3		Treatment is by sewage lagoons.
WIBAUX	640	1		Treatment is by aerated lagoon and polishing pond.
WILLOW CREEK	200	-		New sewerage system needed.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status

MUNICIPAL OR INDUSTRIAL	ESTIMATED LOAD Untreated (p.e.)	STATUS Compliance With Minimum Treatment Requirements	REMARKS
WINIFRED	180	3	Treatment is by sewage lagoon.
WINNETT	250	3	Treatment is by aerated lagoon and polishing lagoon.
WISDOM	0	-	Sewer system and sewage lagoon under construction.
WOLF POINT City of Wolf Point	3,200	3	Treatment is by sewage lagoon.
City Meat Company	300	1	Treatment is by ponding system.
WORDEN AND BALLANTINE	600	1	Lagoon system presently does not have overflow.
YELLOW BAY University of Montana Biological Station and Fish and Game Campground	300	1	Tertiary treatment, including phosphate removal, provided.
YELLOWTAIL DAM Yellowtail Dam Visitor Center	30	1	Activated sludge secondary treat- ment facilities treat waste- waters.

NOTE: This listing does not contain oil production wastewater flows and some of the minor industries which have minor amounts of cooling water discharges.

1. In compliance
2. Not in compliance
3. Further work needed to determine compliance status



Community	Segment	Water Use	Population Served	Scope of Project	Phase Construction	Total Points
Hot Springs	6	2	1	30		39
Rocky Boy	6	2	1	30		39
Gridford	6	2	1	30		39
Malta	4	2	2	30		38
Warm Springs	4	2	2	30		38
Fromberg	2	4	1	30		37
Missoula Sewers	8	6	2	15		31
Whitefish Sewers	8	6	2	15		31
Kalispell Evergreen	8	6	2	15		31
Belgrade	8	6	1	15		30
Lakeside	8	6	1	15		30
Willow Creek	8	6	1	15		30
Amsterdam-Churchill	8	6	1	15		30
Bozeman Sewers	8	4	2	15		29
Dillon Sewers	6	6	2	15		29
Plains	6	6	2	15		29
Troy	6	6	2	15		29
Anaconda-West Valley	6	6	2	15		29
Livingston Sewers	6	6	1	15		28
Opportunity	6	6	1	15		28
Ulm	6	6	1	15		28
Lolo	6	6	1	15		28
Sheridan Sewers	6	6	1	15		28
Corvallis	6	6	1	15		28
Clyde Park	6	6	1	15		28
Libby	6	6	1	15		28
Martinsdale	6	6	1	15		28
Marion	6	6	1	15		28
Great Falls Sewers	4	4	3	15		26
Butte Sewers	8	2	1	15		26
Lewistown Sewers	6	4	1	15		26
Conrad	6	4	1	15		26
St. Ignatius Sewers	6	4	1	15		26
Helena Sewers	6	2	2	15		25
Helena Valley	6	2	2	15		25
Fort Benton	6	2	2	15		25
Ashland	6	2	2	15		25
Lincoln	2	6	2	15		25
Billings Sewers	4	2	3	15		24
Miles City Sewers	6	2	1	15		24
Sidney Sewers	6	2	1	15		24
Roundup Sewers	6	2	1	15		24
Stockett	2	6	1	15		24
Simms	2	6	1	15		24
Geyser	6	2	1	15		24
Havre Sewers	4	2	2	15		23
Billings Heights	4	2	2	15		23
Huntley	4	2	1	15		22
C. F. Storm Sewer Sep.	4	4	3	10		21
Fairfield	2	2	1	15		20
Bank Water Treatment	6	6	2	5		19

*Projects certified but not funded during the fiscal year received additional 50 points.

An acceptable application must be submitted within 90 days of notification by the Department.



APPENDIX B.

ESTIMATED PROJECT STEP SCHEDULING AND RESPECTIVE GRANT NEEDS FOR
FISCAL YEARS 1975, 1976 and 1977

<u>PROJECT</u>	<u>PROJECT DESCRIPTION</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
Three Forks	Railroad Avenue Interceptor	-	-	-
Whitefish (Birch Point)	Birch Point Interceptor	-	-	-
Missoula	Phase II	(3) 975,000	-	-
Three Forks	Upgrade Treatment	(1) (2) 18,750	(3) 168,750	-
Flaxville	Collection and Treatment	-	-	-
Great Falls	Contract IV Construction	(3) 3,138,750	-	-
Victor	Collection and Treatment	(1) (2) (3) 318,750	-	-
Miles City	Upgrade Treatment	(1) (2) (3) 337,500	-	-
Poplar	Upgrade Treatment	(1) (2) (3) 300,000	-	-
Billings 6th Ave. N Int.	Interceptor	(1) (2) (3) 180,000	-	-
Glasgow	Upgrade Treatment	-	-	-
Whitefish	Upgrade Treatment	(1) (2) 37,500	(3) (2) 75,000	(3) 1,035,000
Gallatin Co. RID 305	Complete Construction	(3) 112,500	-	-
Bozeman	Upgrade Treatment	(1) (2) (3) (4) 187,500	(3) 825,000	-
Bigfork	Upgrade Treatment	(1) (2) 11,250	(3) 75,000	-
Livingston	Upgrade Treatment	(1) (2) (3) (2) 225,000	(3) 1,350,000	-
Dillon	Upgrade Treatment	(1) (2) (3) 150,000	-	-
Libby	Upgrade Treatment	(1) (2) 37,500	(3) 562,500	-
Hamilton	Upgrade Treatment	(1) (2) 30,000	(3) (2) (3) 270,000	-
Red Lodge	Upgrade Treatment	(1) (2) 11,250	(3) 93,750	-
Townsend	Upgrade Treatment	(1) (2) (3) (2) 75,000	(3) 420,000	-
Thompson Falls	Upgrade Treatment	(1) (2) (3) 22,500	-	-
Boulder	Upgrade Treatment	(1) (2) 7,500	(3) 16,500	-
Eureka	Upgrade Treatment	(1) (2) 22,500	(3) 150,000	-
Columbus	Upgrade Treatment	(1) (2) 11,250	(3) 22,500	-
Whitehall	Upgrade Treatment	(1) (2) (3) 45,000	-	-
Butte	Upgrade Treatment	(1) (2) 327,000	(3a) 1,434,000	(3b) 750,000
Stevensville	Upgrade Treatment	(1) (2) 37,500	(3) 155,250	-
Manhattan	Upgrade Treatment	(1) (2) (3) (2) 18,750	(3) 97,500	-
Lodge Grass	Upgrade Treatment	(1) (2) (3) 45,000	-	-

<u>PROJECT</u>	<u>PROJECT DESCRIPTION</u>	<u>1975</u>		<u>1976</u>	<u>1977</u>
Sheridan	Upgrade Treatment	(1) (2)	13,500	(3)	90,000
Sunburst	Upgrade Treatment	(1) (2)	9,750	(3)	67,500
Absarokee	Upgrade Treatment	(1) (2)	13,500	(3)	93,750
Darby	Upgrade Treatment	(1) (2)	7,500	(3)	37,500
Ennis	Upgrade Treatment	(1) (2)	9,000	(3)	60,750
East Glacier	Upgrade Treatment	(1) (2)	13,500	(3)	93,750
Roberts	Upgrade Treatment	(1) (2)	7,500	(3)	37,500
Hobson	Upgrade Treatment	(1) (2)	7,500	(3)	15,000
Bearcreek	Upgrade Treatment	(1) (2)	7,500	(3)	42,000
Lewistown	Upgrade Treatment	(1) (2)	37,500		(3) 1,125,000
Laurel	Upgrade Treatment	(1) (2)	37,500		(3) 937,500
Hardin	Upgrade Treatment	(1) (2)	17,250		(3) 116,250
Harlowton	Upgrade Treatment	(1) (2)	22,500		(3) 150,000
Browning	Upgrade Treatment			(1) (2)	Availability of funds will
Chester	Upgrade Treatment				determine scheduling of
					these projects.
St. Ignatius	Upgrade Treatment				"
Valier	Upgrade Treatment				
Brady	Upgrade Treatment				
Judith Gap	Upgrade Treatment				
Rocker	Upgrade Treatment				
Ramsay	Upgrade Treatment				"
Sidney	Upgrade Treatment				
Forsyth	Upgrade Treatment				
East Helena	Upgrade Treatment				
Circle	Upgrade Treatment				

- (1) Step 1 facility planning grant.
- (2) Step 2 construction plans and specifications grant.
- (3) Step 3 construction grant.
 - (3a) Phase I construction
 - (3b) Phase II construction

June 14, 1973

MONTANA STATE DEPARTMENT OF HEALTH
AND ENVIRONMENTAL SCIENCES

PRIORITY SYSTEM FOR EPA CONSTRUCTION GRANTS

- I. The following priority evaluation system is established by the State Department of Health and Environmental Sciences for the allocation of federal grants to municipalities for sewage treatment works construction. This system is based on:

1. Severity of pollution problem.
2. Population affected.
3. Need for preservation of pure waters.
4. National priorities.

The state's construction needs list and ranking of projects will be submitted to EPA by June 30 of each year. From this list, the highest priority projects for which there is money available will receive a notice of project priority. Before receiving an actual priority certification, scheduling for the project must meet department approval.

- II. Projects shall be rated as follows:

1. Stream segment designation*

- a. (i) Water quality limited due to municipal wastewater discharge or a combination of municipal and industrial wastewater discharges. 8

- (ii) Water quality limited due to a combination of municipal-industrial and non-point discharges which create or have the potential of creating a lake eutrophication problem.

- b. Effluent limited. 6

- c. Water quality limited due to non-point discharges in combination with municipal and/or industrial discharges not covered by a. (ii) above. 4

- d. Water quality limited due to non-point sources or abandoned acid mine discharges. 2

2. Water-use classification of stream receiving discharge:

- a. B-D₁ or higher 6
b. B-D₂ or C-D₁ 4
c. B-D₃ or lower 2

3. Population served by project:

- a. 10,000 or greater 3
b. 1,000 to 10,000 2
c. Less than 1,000 1

4. Scope of the project in abating pollution:

- a. Abatement of a serious public health hazard or nuisance for which an abatement order has been issued by the department's executive officer. 40
- b. Improved treatment or new treatment to replace existing facilities or new treatment facilities to serve existing untreated discharges. Facilities are needed to meet water quality criteria or minimum treatment requirements. (Includes reduction of infiltration water) 30
- c. Elimination of individual disposal systems that presently create localized public health problems or public health hazards. 15
- d. Separation of storm and sanitary sewers to prevent by-passing. 10
- e. Waste handling facilities for a water treatment plant. 5

5. Phase construction:

- a. Grant previously awarded on prior phase of project and new grant needed for next phase to keep project on schedule. 30

III. Where more than one project has the same number of priority points, further rating of the projects will be based on population equivalent served by the project.

*Water quality limited means that to protect the streams with this designation, treatment greater than the general minimum treatment levels established for wastewaters are needed to meet stream water quality criteria.

Effluent limited means that the general minimum treatment levels established for wastewaters are ample to meet stream water quality criteria.

The general minimum treatment level for domestic sewage is secondary treatment. For new sources of wastewater, the state's anti-degradation statement is applicable.

A JOINT RESOLUTION OF THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA REQUESTING THE GOVERNOR OF THE STATE OF MONTANA IMMEDIATELY TO MARSHAL ALL RESOURCES OF THE STATE AND TO SEEK EMERGENCY AID FROM THE FEDERAL GOVERNMENT TO HALT FURTHER DESTRUCTION OF MONTANA'S NATURAL RESOURCES IN SOIL, WATER AND WILDLIFE AND FURTHER DAMAGE TO MONTANA'S ECOLOGY AND ECONOMY BY SALINE SEEP CAUSED BY AGRICULTURAL PRACTICES AND GEOLOGIC CONDITIONS.

WHEREAS, the United States department of agriculture's Montana committee for rural development and soil conservation service soil scientists reported eighty-one thousand four hundred thirty (81,430) acres of saline seep in twenty-five (25) Montana counties in March 1971, and

WHEREAS, that report listed only eight hundred (800) acres for Valley County, but in 1972 only forty (40) producers reported two thousand six hundred eighty-nine (2,689) acres, and

WHEREAS, the United States department of agriculture's state committee for rural development in its December 31, 1971, Montana situation statement recognized increasing saline destruction of Montana's cropland and increasing saline pollution of Montana's water, and

WHEREAS, water earlier became unpalatable at Washua then downstream at Wiota and now has spread further downstream to Frazer on the Missouri river, and

WHEREAS, fish no longer can live in many stockwater ponds in northeastern Montana, and

WHEREAS, the United States department of agriculture's Montana committee for rural development, based on geologic conditions, estimated there are eight million (8,000,000) acres of potential saline seep areas in Montana, and

WHEREAS, Montana bureau of mines and geology by recent report said one hundred fifty thousand to two hundred fifty thousand (150,000 to 250,000) acres of nonirrigated Montana farmland has now been lost to saline seep, that this destruction is increasing in excess of ten percent (10%) per year compounded and that some saline seep discharge has measured salinity one and one-half (1.5) times that of seawater, and

WHEREAS, agricultural practices of enforced summer fallow and double summer fallow have contributed strongly to increasing destruction by saline seep requiring special attention and remedial action in the agricultural sector, and

WHEREAS, correction of these agricultural practices will require interagency coordination and education of many producers in improved farm management, and

WHEREAS, saline seeps and recharge sites override property and geo-political boundaries requiring treatment on an area, not single farm, basis, and

WHEREAS, producers having land comprising seep and recharge areas may require compensation within the federal farm program to

APPENDIX E

(AGREEMENT)

FOR CERTIFICATION OF ADEQUACY OF CERTAIN DOCUMENTS RELATING TO WASTEWATER TREATMENT FACILITY CONSTRUCTION GRANT APPLICATIONS

The undersigned, on behalf of the Montana Water Quality Bureau, Division of Environmental Sciences, State Department of Health and Environmental Sciences and the U.S. Environmental Protection Agency, hereby agree that assurance of completeness and adequacy of the below-mentioned documents will be accepted in lieu of EPA review with respect to application for construction grants under the Federal Water Pollution Control Act, subject to the terms and conditions below.

I. Plans and Specifications:

A. The State of Montana will:

1. Determine that the proposed facilities have been designed in accordance with Attachment A, entitled Federal Guidelines on Design, Operation and Maintenance of Wastewater Treatment Facilities, and timely supplements to those guidelines; and
2. Determine that the proposed facilities have been designed in accordance with the review criteria listed in Attachment B, entitled Program Checklist for Plans and Specifications; and
3. Determine that adequate plant staffing requirements are submitted with the plans and specifications, including an itemized list of positions and jobs to be established, duties and responsibilities of the positions, and the number of persons to be provided in each of these positions at commencement of plant operation.
4. Submit such determinations to EPA as assurance that the requirements of (1), (2) and (3) have been met.

B. The U.S. Environmental Protection Agency will:

1. Accept such assurance as satisfying the requirements established in 40 CFR 35.925-7 (b) and (d) and that the design for the project meets or exceeds such guidelines as the Administrator has published concerning treatment works design, and
2. Expressly retain ultimate responsibility for final determinations respecting the grant conditions listed under 40 CFR 35.935, and including:

- (a) Facility planning,
 - (b) State planning,
 - (c) Priority certification,
 - (d) State allocation limitation,
 - (e) Applicant's funding capability,
 - (f) Permits,
 - (g) NEPA review,
 - (h) Civil Rights, and
 - (i) The scope of the project and the grant amount.
3. Prepare and mail an approval letter to the grantee, which approves the plans and specifications on behalf of both the State and EPA, and authorizes the grantee to advertise for bids.

II. Change Orders/Addenda:

A. The State of Montana will:

- 1. Review all change orders and addenda submitted by the grantee.
- 2. Change Orders or addenda which do not receive State approval should be returned to the grantee; all such documents receiving State approval should be forwarded to the EPA Regional Office.

B. The U.S. Environmental Protection Agency will:

- 1. Accept such State-approved documents as satisfying the requirements established in 40 CFR 35.935-11.
- 2. Retain responsibility for final determinations concerning changes in the scope of the project and the grant amount.
- 3. Prepare and mail an approval letter to the grantee.

III. Operation and Maintenance Manuals:

- A. The State of Montana will review such manuals for adequacy and completeness pursuant to 40 CFR 35.935-12, and the requirement


of Federal Guidelines for Design Operation and Maintenance of Waste Water Treatment Facilities and subsequent revisions thereof, using as a model the outline included in Attachment F. Where modifications, corrections, revisions, addenda, additions, etc., are needed to approve a manual as adequate and complete, the state shall seek such modifications, corrections, addenda, etc., from the applicant, his consulting engineer, or the person responsible for preparation of the manual. When a manual is prepared by someone other than the consulting engineer who designed the facility, the state shall obtain the consulting engineer's approval of the manual to indicate that proposed operating procedures are compatible with the design of the facility. A written determination that each such Operation and Maintenance Manual is adequate and complete will be submitted to the Regional Administrator as assurance that the grantee's Operation and Maintenance Manual is satisfactory. The Regional Administrator shall be supplied with a copy of the review checklist and a copy of the approved O & M Manual for his files.

- B. The U.S. Environmental Protection Agency will accept such assurance as satisfying EPA's requirement that a satisfactory Operation and Maintenance Manual be submitted. EPA will notify the applicant and his consultant of O & M Manual approval upon receipt of the required assurances from the state.
- IV. This agreement shall be effective until June 30, 1975, and may be renewed thereafter.
- V. The State of Montana will perform the reviews specified in this agreement with respect to all applications for wastewater treatment facilities grants received by the state agency during the term of this agreement, or any renewal, except in the case of projects involving special circumstances delineated by the Regional Administrator. It is agreed that all such reviews will be performed under direction of a registered professional engineer.
- VI. The U.S. Environmental Protection Agency will assume responsibility for the review and approval of all plans and specifications on projects where the Regional Administrator has determined the need for an Environmental Impact Statement pursuant to the provisions of the National Environmental Policy Act of 1969.
- VII. State determinations regarding matters subject to this agreement will be final and conclusive except for areas of primary Federal responsibility (I.B.2), or determinations which are grossly erroneous, arbitrary or fraudulent. The State may not redelegate the authority provided by this agreement.

- VIII. This agreement may be terminated at any time by either party, provided 180 days written notice is given by the party initiating such termination to the other party.
- IX. This agreement may be amended at any time by the formal written agreement of both parties.
- X. The State shall keep adequate records of all actions performed under this agreement and provide the U.S. Environmental Protection Agency with access to those records.
- XI. In situations involving disputes between the State and the Regional EPA Office over provisions of this agreement, the U.S. Environmental Protection Agency Administrator shall be the final arbitrator.
- XII. The parties agree that all applicable provisions of 40 CFR, Part 35, Subpart B Program Grants will be complied with in the performance of this agreement.
- XIII. Authority: This agreement has been executed pursuant to the provisions of EPA Orders 1000.10 and 1270.3.

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY

May 7, 1974
Date


Regional Administrator, Region VIII

FOR THE STATE OF MONTANA

June 12, 1974
Date


Chief, Water Quality Bureau